



## **RCRA Compliance Inspection Report**

# U.S. Department of Energy Hanford

**Central Waste Complex** 

Richland, Washington

WA7890008967

April 1-2, 2014

Jack Roller

**RCRA Compliance Officer** 

U.S. Environmental Protection Agency

Office of Air Waste and Toxics

RCRA Program Unit boller.jack@epa.gov

Peer Review Signature

Date

7/14/2014 And 8/1/2014

r Review Signature

Date

>-E

#### **Table of Contents**

#### **Section A: Basic Facility and Inspection Information**

Facility Information

Inspection Information

#### **Section B: General Facility Information**

Owner/Operator Information

Site Location

**Background and Activities** 

#### Section C: Regulatory Information

Compliance History

Regulatory Status

Site Hazardous Waste Information

#### Section D: Description of Inspection

Purpose of Inspection

Inspection Entry and Opening Conference

Inspection Summary

Closing Conference

Post Inspection

#### **Attachments**

- A. Aerial photo
- B. Photograph log and photos
- C. Documents received from facility
  - a. Permit Application Part A for CWC
  - b. Attendance Roster
  - c. Document Request List
  - d. Response to Information Request
- D. Document disc

#### **Disclaimer**

This report is a summary of observations and information gathered from the facility at the time of the inspection. The information provided does not constitute a final decision on compliance with RCRA regulations, nor is it meant to be a comprehensive summary of all activities and processes conducted at the facility.

#### **Section A: Basic Facility and Inspection Information**

Facility Information

Handler Name:

U.S. Department of Energy Hanford

Handler ID Number:

WA789008967

Facility Contact/Title:

Cliff Clark, Regulatory Compliance Manager

Facility Location Address:

Hanford Facility, Richland Washington

Facility Mailing Address:

P.O. Box 550, Richland, Washington 99352-0550

Contact Phone Number:

(509) 376-9333

Contact Email Address:

clark.cliff@rl.doe.gov

**GPS Coordinates of Site:** 

Lat: 46.565007

Long: -119.511100

Inspection Information

Inspection Type:

Focused Compliance Inspection (FCI) for the Central Waste Complex

(CWC)

Inspection Date:

April 1, 2014 April 2, 2014

Arrival Time:

8:30 am PDT

8:45 am PDT

Departure Time:

4:30 pm PDT

9:30 am PDT

Inspection Team:

Jack Boller, Compliance Officer, EPA

Kevin Schanilec, Senior Enforcement Engineer, EPA

Michael Prescott, EPA Contractor

Kathy Conaway, Ecology Nancy Ware, Ecology Edward Holbrook, Ecology

Section B: General Facility Information

Owner/Operator Information: The owner of the Hanford facility is the United States Government. The primary operator is the U.S. Department of Energy (DOE). DOE uses multiple contractors to manage the facility and conduct various onsite activities. DOE has designated CH2MHill Plateau Restoration Company (CHPRC) as the primary contractor for management of the CWC.

<u>Site Location</u>: The Hanford Nuclear Reservation (Hanford, Reservation, or facility) is an approximately 600 square mile facility located in central Washington State immediately north of Richland, Washington. It is bounded on the north and east by the Columbia River. Immediately to the south of the Reservation is the Richland/Kennewick/ Pasco Tri-cities urban area. The area north of the river is the Hanford

Reach National Wildlife Preserve. The surrounding areas to the east and west are sparsely populated agricultural land. According to EJSCREEN, the facility is not in an environmental justice area. There are areas within the facility that have cultural significance to various central Washington and central Oregon Native American Tribes. The CWC hazardous waste unit group is located near the center of the Hanford facility on the west side of the Hanford 200 West Area and approximately 15 miles north of the southern boundary of the facility.

Background and Activities: According to the US DOE Hanford Dangerous Waste Permit Application Part A form (Part A) for the Central Waste Complex (CWC) unit group (see Attachment C), the CWC began operating in 1988. It consists of 50 individual container storage units that have a total capacity of 20,769,400 liters.

#### **Section C: Regulatory Information**

Compliance History: The Hanford facility has been a RCRA Significant Non-Complier (SNC) since the mid-1990s. In the early 1990s, DOE entered into a Tri-Party Consent Agreement (TPA) with EPA and the Washington Department of Ecology (Ecology) to set enforceable schedules for achieving milestones for site wide clean-up and RCRA permitting. Since the mid-1990s DOE has been out of compliance with the enforceable schedules in the TPA. In addition, over the years, several incidences of noncompliance with the permit conditions and generator regulations have been found by EPA and Ecology inspectors that have resulted in additional SNC determinations.

EPA's National Environmental Investigations Center (NEIC) conducted an inspection at the Hanford facility in March of 2011. NEIC inspected a small subset of the Facility unit groups and identified nineteen storage units that were not authorized in the Permit and were not identified on the Part A. EPA determined that these nineteen units were illegal unpermitted units and issued an enforcement action, in June, 2013 against DOE that required DOE to pay a penalty and to work with Ecology to close the illegal units. Included in the nineteen illegal units were Outdoor Storage Areas A and B of the CWC. The CWC was the focus of this inspection. In October, 2013 DOE submitted closure plans for the Outdoor Storage Areas A and B of the CWC to Ecology as required by the June, 2013 EPA enforcement action. Ecology's determination of completeness and adequacy of the closure plans for these units was pending at the time of this inspection.

Regulatory Status: The Hanford facility is a permitted Treatment, Storage, and Disposal facility as well as a large quantity generator of hazardous waste. The RCRA TSD Permit was originally issued by Ecology in 1994 and had an expiration date of September 27, 2004. DOE has filed an application to renew the Permit. Pursuant to the provisions found in WAC173-303-806(7)(a), DOE will continue to operate under the original Permit until a new permit is issued. A new permit is projected in 2016.

The Permit has undergone several modifications. The current active Permit, including modifications, is Permit Revision 8C, Class 1 Modification, dated March 31, 2012 (Permit). It identifies multiple hazardous waste unit groups within the facility. Within each unit group, there may be several individual treatment, storage, or disposal units. The Permit has final status operating standards for some of the unit groups. Section I.A of the Permit requires those units that do not have final status permit standards to operate in compliance with the interim status standards until such time that final status permit standards are implemented for that unit. Final status permit standards can be implemented either through a permit modification or issuance of a new permit. The Part A of the Permit Application for each unit group identifies the activities being conducted in that unit group and wastes that are potentially being managed in the unit group.

The CWC unit group does not have final status operating standards in the Permit and therefore, per Section I.A of the Permit, is subject to RCRA interim status standards.

I reviewed the Part A associated with the CWC. I noticed that in Section IV of the Part A, the Physical Location of the facility is given as 825 Jadwin, Richland, Washington. This is the address of the federal building in Richland that is approximately 5 miles away from the southern boundary of the Hanford facility and 20 miles from the CWC location.

Site Hazardous Waste Information: According to the Part A, the CWC units may manage 43 federal characteristic hazardous wastes, 400 federally listed hazardous wastes, and 7 Washington State only dangerous wastes. According to the container labeling I observed and information provided by facility personnel the vast majority of the wastes managed by the CWC are classified as radioactive mixed waste. Radioactive mixed wastes are a combination of hazardous and/or dangerous waste mixed with radioactive waste. The Department of Energy, the Washington State Department of Health, the Washington State Department of Ecology, and the EPA all have regulatory authority over mixed waste.

#### **Section D: Description of Inspection**

Purpose of Inspection: This was a focused compliance evaluation inspection (FCI) of the CWC unit group. The facility was inspected to ensure compliance with the Hanford Facility Resource Conservation and Recovery Act Permit, Permit Revision 8C, Class 1 Modification, dated March 31, 2012 (Permit) and for compliance with Washington's federally authorized hazardous waste program including but not limited to: WAC 173-303-170 through 230 standards for hazardous waste generators; WAC 173-303-573 standards for universal waste; and WAC 173-303-515 requirements for management of used oil.

Inspection Entry and Opening Conference: The EPA members of the inspection team arrived in Richland on March 31, 2014, the day before the inspection, to complete site safety and security training that is required for facility access. Around 3:00 p.m., I contacted Cliff Clark, the DOE Regulatory Compliance Manager, by phone. I told him that we would be inspecting the CWC unit group the next day. I confirmed that we were planning to meet at the federal building in Richland in the morning to begin the inspection.

At 8:00 a.m. on April 1, 2014 we arrived at the federal building in Richland so that Mr. Prescott could receive a visitor pass and we could confirm that we had completed the required training. At 8:15 we were joined by Cliff Clark, and Tony McKarns of DOE. They escorted us to a conference room. Around 8:40 we began the inspection with an opening conference. Twenty-one people were in attendance. For a complete list of attendees, see the Attendance Roster sheet in Attachment C or on the document disk, Attachment D. DOE was represented by, among others, Cliff Clark, Tony McKarns, and Michael Collins.

Mr. McKarns and Mr. Collins accompanied us on the remainder of the inspection. Joel Williams, who is the primary contact for CHPRC also accompanied us on the inspection. Kathy Conaway, Nancy Ware, and Edward Holbrook from Ecology were also present and accompanied us on the inspection.

In the opening conference, I explained that this would be an EPA lead inspection and that we would be evaluating compliance with the Permit and the Ecology federally-authorized Dangerous Waste Regulations. I confirmed the date of the most current version of the active Part A with both Ecology and DOE. We agreed to meet at 9:00 am the following morning for a closing conference. We ended the opening conference and boarded a DOE bus for the trip to the CWC site.

We arrived at the CWC site at 9:45 a.m. We met with the CWC staff, whose names were added to the attendance sheet. David Giles, the Operations Manager and Linda Petersen, the Environmental Compliance Officer were our main contacts during our inspection of the CWC. We began with a short site safety briefing and a short opening conference at the CWC. I asked Mr. Giles for a description of

the activities conducted in the CWC units.

Mr. Giles explained that CWC consists of several, indoor and outdoor, container storage units. He said that the CWC is currently accepting waste from a Hanford onsite waste operation that is being conducted to retrieve and process approximately 18,000 containers of waste from one of the old Hanford burial grounds.

I asked about specific issues that had arisen in the last four or five months regarding corroded containers from the retrieval of wastes from the burial ground. Mr. Giles explained that when the containers are retrieved from the burial ground and brought to CWC, many of the containers arrived at the CWC showing evidence of corrosion due to being buried underground for as many as 40 years. He said that when CWC staff conduct the weekly inspections of the container storage areas the staff notes if the corrosion on a particular container is getting worse. If it is, then the container/s are placed on a Watch List and watched more closely. If the containers appear to be close to corroding through the drum wall or a container begins to leak, the container/s are repackaged into new drums or over packed. He said that the Watch List program was instituted three months prior to this inspection, near the beginning of the year.

I provided Mr. Williams a list of documents (see Attachment C) that I said the inspection team would like to review at the conclusion of our physical tour of the facility. I said that we didn't expect to have time to review all of the documents while we were onsite; that we would likely need to review some of the documents when we returned to our offices. He agreed to compile all the documents I requested on a disk (see Attachment D) and he said he would send the disk to me at my EPA e-mail address.

Mr. Giles informed us that in order to go into any of the storage buildings we would need to go through the ACE process. This process involves reading and signing a radiation work permit and agreeing to allow a hand and foot radiation survey before exiting a designated radiation area. Once the inspection team completed the ACE process we ended the opening conference at the CWC and began a tour.

#### Inspection Summary:

During the tour I observed that the CWC unit group consisted of multiple container storage units. Six of the container storage units were outdoor storage areas (OSA). The remainder of the container storage units in the CWC were various sized metal buildings. I observed that the outdoor storage areas are all uncovered gravel pads. According to Mr. Giles the pads are all built on top of native soils with no liner or artificial layer under them. I observed that the pads did not have any curbing or berms to provide secondary containment or to prevent run-on or run-off of storm water (see photos HPIM4747 and HPIM4749 below).



Photo HPIM474 OSA-A looking north from the



Photo HPIM4749 looking southeast showing no

South edge of the pad.

containment around edge of pad.

I observed that the storage buildings are built on rectangular concrete pads with curbing on all four sides of the concrete floor. Mr. Giles stated that the curb is intended to provide secondary containment for the containers that are stored in the buildings. The floors are also sloped down toward the center from each side to provide additional containment. Each building has a man door and a large overhead roll-up garage type door on either end. There is a concrete ramp on both sides of each doorway to allow easy movement over the secondary containment berm. Containers used for storage range in size from 30 gallon drums up to large burial boxes that are several hundred gallons in volume.

During the tour, we inspected all of the storage units in the CWC that Mr. Giles said contained waste. According to Mr. Giles, all of the units we inspected were subject to interim status standards.

In addition to my observations, and those of the inspection team, unless otherwise noted, the source of information for each area visited was Mr. Giles.

Specifically, we inspected the following areas of the CWC:

- •Flammable and Alkali Waste storage area: There were 27, 12'x4'x8' rectangular metal container storage modules, we looked in 4 of the 27 modules as a representative sample of dangerous waste storage activities in the modules. The 4 modules inspected all had containers of radioactive mixed waste in them. Mr. Giles stated that some of the modules that were not inspected contained radioactive only waste and a few of them were empty.
- •Outside Storage Areas (OSA) A through F: In OSA-A, OSA-B and OSA-F I observed large burial box containers of radioactive mixed waste or dangerous waste. There was no waste being stored in OSA-C, OSA-D, and OSA-E,
- •Buildings 2404WA, 2404WB), and 2404WC: Buildings 2404WB and 2404WC were originally part of the Waste Receiving and Processing (WRAP) facility which is located adjacent to the north end of the CWC. At the time of the inspection the WRAP was not operating. I observed containers of radioactive mixed waste in 2404WA and 2404WC. I observed that there was no waste in Building 2404WB.
- •Buildings 2402WA through 2402WK. I observed that Building 2402WC was empty and Building 2402WD contained only empty containers. I looked in all of the other buildings in this group and observed that they contained containers of radioactive mixed waste or dangerous waste.

After visually inspecting the CWC units we interviewed Paula Gray, the Emergency Coordinator for the CWC, and asked her questions regarding emergency response plans and employee training. We also interviewed Dean Nester who manages the waste profiles for CWC. I asked him questions specific to waste designation and waste confirmation protocols used at the CWC.

The following are potential areas of non-compliance with permit conditions, interim status requirements (for those units on the Part A that do not yet have final permit status), or conditions that allow an owner or operator to accumulate waste without having a permit or interim status that the inspection team observed during the inspection or as part of the file review.

In OSA-F we observed a large box that we were told by Mr. Giles contained Tank D-10. The box was irregular in shape and approximately 500 cubic feet in volume. Mr. Giles explained that Tank D-10 had originally been used in the redox process at U-Plant. As part of a CERCLA action Tank D-10 was placed in the box and moved to CWC in September of 2011. Once at the CWC, Mr. Giles continued to explain, the large box containing Tank D-10 was placed in the OSA-F.

At the time of the inspection the large, 500 cubic feet box we observed in OSA-F was clearly marked with the words "hazardous waste". The container also had a label on it that indicated the waste in the container had been designated as ignitable characteristic dangerous waste, D001. The risk label on the container indicated that the waste was an oxidizer and corrosive (see photo HPIM4742 below). According to Mr. Giles the 500 cubic feet box had been placed in storage at CWC in September of 2011. The D001 dangerous waste in the 500 cubic feet box had been in storage for more than one year.



Photo HPIM4742 Box containing Tank D-10

Through the TPA, EPA and Ecology have agreed to allow storage of hazardous waste, at the Hanford facility, for periods exceeding one year, provided that the waste is on an agreed schedule for treatment to meet LDR standards. On May 2, 2014, DOE responded to an EPA information request regarding numerous containers of mixed waste or dangerous waste that had been in storage for over a year. In that response, DOE provided general information as to whether or not containers at the CWC met the conditions for greater than one year storage allowed in the TPA. My review of this information found that DOE stated in general terms that all containers at the CWC that had been in storage for more than one year met the agreed to conditions, but they did not specifically identify the box containing the D-10 tank as one of these compliant containers.

During our inspection of OSA-A, I observed several large rectangular containers that are referred to by facility personnel as "burial boxes." Mr. Giles told us that these boxes each have a capacity of several hundred gallons and most of them contain radioactive mixed waste or dangerous waste. Mr. Giles said that there were 122 of these boxes in OSA-A at the time of the inspection. I observed that many of these boxes had been covered with tarps. Mr. Giles told us that these burial boxes were covered by tarps pursuant to a consent agreement with Ecology. I saw that the tarps were made of heavy synthetic material and were securely tied down around the sides of the containers so that they completely covered the containers all the way to the ground. It was not possible for me to inspect the containers under the tarp without first removing the tarp. Mr. Giles confirmed that the containers could not be inspected unless the tarps were removed. He further explained that because the tarps were very heavy and were tightly secured, it was not possible to look under the tarps and observe the condition of the actual container during weekly inspections. Mr. Giles verified that, because of this inability to look under the tarps, when CWC employees conduct the weekly inspections they only assess the condition of the tarps and are not looking for deterioration of the containers caused by corrosion or other factors. He said that they would only detect leaks if the leaking material was running out from under the tarps. Containers of hazardous waste are required to be inspected weekly to ensure that they are not leaking and there is no deterioration of the containers caused by corrosion or other factors (see photo HPIM4746).





Photo HPIM4746 Tarp covered waste containers in OSA-A

Attached to the outside of each tarp covered container inside the OSA-A, I observed a square metal panel. The panels contained, among other things, hazardous waste and risk labels. Mr. Giles explained that these panels were used for displaying all of the required labeling for each container (see photo HPIM4750). It was unclear to the inspection team if each container is also labeled under the tarp or only on the panel attached to the exterior of the tarp.



Photo HPIM4750 Metal plate holding labels for waste container.

In addition to the hazardous waste and risk labels, the majority of the tarps covering the containers we observed in OSA-A were marked with a label that read "ACMP". We were told by Mr. Giles that an ACMP label indicated that the containers were part of the facility's Abnormal Container Management Program. I asked for a description of this program. Mr. Giles explained that the ACMP is part of the Watch List that was mentioned in the opening conference. He said that containers that are observed by facility personnel to be "abnormal" due to excessive corrosion, severe dents, or contents that are likely

to cause excessive corrosion are placed in this program. I asked for any documentation they might have that described the program. Mr. Williams added this to the document request list.

I reviewed the inspection plan and inspection checklists (logs). Appendix A of the plan specifies for one of the items on the checklist the following criteria: "Container integrity is not compromised by ... excessive corrosion..." (This is Item 6 or 7 on the checklist depending on the age of the checklist). In addition, Appendix Q of the plan ("Criteria for Entry into Abnormal Container Management Program") Category 2 specifies that a criteria for entry into the ACMP is "Damaged and corroded (degraded) containers that cannot be safely handled using approved operating methods and/or procedures without a likely spread of contamination." Based on the information I was provided, it appears that adding a container to the ACMP is the first step of the process for eventual repackaging of waste or over packing damaged/corroded containers. Based on the condition of containers of waste I observed throughout the CWC, it appears that the ACMP criteria allows problematic containers, those that have already been determined to have compromised integrity due to corrosion, to be considered acceptable for continued storage of radioactive mixed waste.

I asked Mr. Giles about the plans for the final disposition of the 122 containers in OSA-A. Mr. Giles responded that they would eventually all be sent to Permafix who currently has the capacity to treat the waste to comply with LDR standards; and after treatment the containers would be returned to Hanford for final burial. He said that Permafix charged \$50,000 per cubic meter (approximately \$1,000,000 per box) to treat the waste and so, even though Permafix has the capacity to treat all of the waste, the rate of processing the waste in OSA-A is dependent on the budget to do the work. He further stated that the TPA set a milestone of 2016 for DOE to establish either onsite or offsite capabilities to treat all of the containers of waste being retrieved from the burial grounds and stored at the CWC and a milestone of 2030 to complete the treatment of all these containers of waste.

In the northeast corner of OSA-A I observed container 231ZDR-11. This container was the subject of an Ecology enforcement action in January, 2014. In that action, Ecology alleged that no only had liquids been released from this container but the response made by DOE and its contractors to address the leaks from this container were inadequate. Mr. Giles explained that although the DOE had determined that container 231ZDR-11 was leaking in February of 2012, waste still remained in container 231ZDR-11 instead of being transferred to a container that is in good condition. He further stated that the container had not been moved since the leakage was first noted.

Unlike other containers in OSA-A, 231ZDR-11 was under a plastic cover that did not reach all the way to the ground. The plastic tarp over this leaking container was approximately seven feet off the ground. Instead of the tarp being secured at the base of the container like the other covered containers in OSA-A, the plastic cover on 231-ZDR-11 was supported by a metal frame. Because all of container 231-ZDR-11 was visible I was able to see that this rectangular container had walls made of concrete supported by a metal frame.

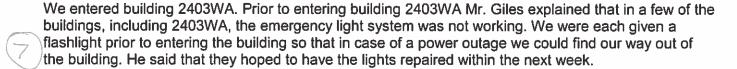
The container was supported about six inches above the ground by a steel frame with legs. I observed several rusty metal trays under the steel frame around the sides of the container. The trays were approximately two feet by three feet and approximately four inches deep (see photo HPIM4756 below). Mr. Giles explained that the purpose of the trays was to collect storm water that came in contact with the box as well as collect any materials that leaked from the box. He said that any liquid that collects in the trays is pumped out into a container and managed as hazardous waste. It wasn't clear whether the trays were considered secondary containment or accumulation containers. It appeared that the trays were not large enough to hold storm water from a twenty-five year storm event of twenty-four hour duration as required by the secondary containment rules. If they were considered accumulation containers they were not closed and not marked with the words "Hazardous Waste" or "Dangerous Waste" nor were they marked with the risk associated with the waste.





Photo HPIM4756 Container 231ZDR-11 showing rusted trays under yellow steel frame

Inside two of the trays under container 231ZDR-11 I observed two clear plastic containers that each had a volume of approximately five gallons. Each five gallon container appeared to be connected to container 231ZDR-11 by a plastic hose. Mr. Giles explained to me that wicking material had been attached to the frame around the bottom of container 231ADR-11 where leaking had been observed. Mr. Giles told me that the wicking draws any moisture or leakage from the frame and conveys it into the tubes which then drain the collected materials into the five gallon containers in the trays under container 231ZDR-11. Mr. Giles said that the containers were pumped out every couple of months. The liquid that is collected is managed as hazardous waste. The five gallon containers had no labels on them and were not marked with the words "Hazardous Waste" or "Dangerous Waste". They were also not marked or labeled to identify the major risks of the waste being accumulated in them (see lower left hand corner of container in photoHPIM4756 above).



In building 2403WA I observed several hundred 55 gallon drums which Mr. Giles said contained mixed hazardous waste. Among them, Mr Giles pointed out twelve drums that he told me the DOE had over packed because the corrosion of the metal drums was bad enough that it had resulted in the contents of the containers leaking. He also said that because the containers leaked, there were also radiation releases. He told me DOE discovered the leaking containers and radiation releases in November and December 2013. Mr. Giles stated that the over packed drums would be going to Permafix for treatment.

I saw that some drums in building 2403WA had labels on them that indicated that they were on the "Watch List" that had been discussed in the opening conference. Mr. Giles explained that because of insufficient funding to immediately transfer the waste from all of the corroded drums in the CWC to containers in good condition as required by the regulations, the Watch List had been started in early



January 2014 to help prioritize which corroded containers contents would get transferred to containers that are in good condition.

In building 2402WB we observed several hundred drums that Mr. Giles said contained mixed waste contaminated soils. I did a rough count and found approximately 288 of the drums that had corrosion (rust) all the way around the bottom ring and in patches up the sides of them (see photo HPIM4768 below). Mr. Giles said that they had come out of the burial ground with the corrosion on them. He said that instead of immediately transferring the contents to containers in good condition, they visually monitor them during the weekly inspections and if the corrosion on a drum gets worse they would place the drum on the Watch List.



Photo HPIM4768 Corroded drums in building 2402WB

In building 2402WF I saw several drums that were labeled in a way that indicated they contained mixed waste. These drums appeared to be new. Mr. Giles said that some of the waste that had been in corroded drums in the 2402WB had been transferred to these drums.

<u>Closing Conference:</u> On April 2, 2014 we met at 9:00 am at the Federal building in Richland for a closing conference.

I expressed concerns regarding the malfunctioning emergency lights in the buildings. Facility representatives assured us that there was a work order in place and repairs had been scheduled.

I mentioned the corroded drums in 2402 WB. I said we would need to review the documentation regarding the management of these drums before we could make a compliance determination.

I discussed the fact that because the containers in OSA-A are covered with heavy tarps, it is not possible to see the actual walls of the containers for the purpose of weekly inspections to assess the condition of the container.

I stated that we might have more concerns once we received and reviewed the documents we requested.

I thanked the facility representatives for their time and cooperation and we ended the inspection at 9:30 am.

Records Review: Following the onsite portion of the inspection, I received, on April 10, 2014, a disk containing the documents that I had requested for review (see Attachment D). These documents were reviewed by Mr. Prescott and me.

I requested copies of the following documents, which we reviewed:

- •Part A forms for CWC and WRAP;
- Waste Analysis Plan for CWC;
- •Manifests and shipping records for both incoming and outgoing shipments at CWC;
- Training records for CWC staff;

10

- •Inspection plans and inspection logs for CWC and WRAP for September and November of 2013 and for January, February and March of 2014;
- ·Building emergency plans and contingency plans for CWC and WRAP;
- Drum Watch List and ACMP procedures;
- •Acceptable knowledge (AK) pages for wastes coming to CWC; and the
- •Recovery plan for the lighting issues at CWC.

Mr. Prescott reviewed completed weekly inspection checklists (logs) for all the areas of the CWC for all of September 2013 and the last week in March 2014 to establish the start and end points for each storage unit. He also reviewed random checklists for November 2013 and January, February, and March 2014. He found that we did not receive completed checklists for the week of September 29, 2013 for Bldg. 2403WB and Bldg. 2420 W (this could be because the inspections were done in early October, but Mr. Prescott observed that other buildings that were inspected in early October had completed checklists included in with the September checklists). Inspection checklists were also missing for the Outside Storage Areas for all of November 2013.

Following Mr. Prescott's review, I reviewed the inspection plan and checklists (logs) to verify his findings. We observed that weekly inspection checklists were completed for 24 units in CWC and miscellaneous areas. It appears all of the areas we inspected in the CWC on April 1, 2014 were included in the checklists, although the designations of some areas in the completed checklists were not easily matched. For example, inspections were conducted of the "AMW" area, which is probably the Alkali Metal Waste Storage Modules, but the abbreviation AMW was not clarified in the checklists or Inspection Plan. Also there were checklists for the "Outside Storage Area or OSA" which would presumably cover all the outside storage areas where RCRA wastes could be stored, but this was also not clarified in the checklists or Inspection Plan. Some weeks the checklist that was used was labeled "outside storage areas" and some weeks the checklist that was used was labeled "outside storage area." So it was unclear whether there was more than one Outdoor Storage Area that was inspected. While reviewing the weekly checklists for the 24 container storage areas, we noted that for the five months that we requested records, there were nine container storage areas that, according to information on the weekly container checklists, were not inspected because there were no containers being accumulated in those areas.

We also analyzed how the facility used the weekly inspection checklists. It appeared that if, during an inspection of a container storage area the person conducting the inspection observed one of the problems listed on the checklist of things they were to look for during the inspection, the person noted that observation on the checklist, with the word "No" in the associated box. The "problem" as indicated by the word "No" was described in the Comments section at the bottom of the checklist and a "corrective action number" was assigned to the problem. All noted problems that had a corrective action number were added to a separate document called the "Open Items List". We were not provided a copy of the Open Items List and therefore did not review it.

Our review of the weekly inspection checklists indicated that, if, subsequent weekly inspections of the container area identified that the problem still existed, then the weekly checklists for the newest inspection of that container area was marked "Yes", which according to Mr. Giles means satisfactory,

because a corrective action number had already been assigned. Additionally the open "corrective action number" for the item was listed in the Comments section at the bottom of the checklist form.

Although the checklist documented that a certain type of problem was found in a container storage area, the actual deficiencies were not always described on the weekly checklist. We found several instances where the actual deficiencies were not described and could not be determined even though a corrective action number was assigned; for example, the weekly inspection checklists for 2402 WE and 2402 WH for the week of September 3, 2013.

While reviewing the weekly inspection checklists we noticed there were a few instances when it would take months to remedy a problem that had been added to the Open Items List. For example, the problems that were documented on September 3, 2013 in the 2402 WE and 2402 WH storage units were still being documented on the weekly inspection checklist on March 31, 2014, almost 7 months later. Also Mr. Prescott noted, that the weekly inspection checklist for the week of September 1<sup>st</sup>, 2013 indicated that there were three, previously found problems that had been assigned corrective action numbers at 2403 WC that were still documented as existing at the end of March and at various intervals in between.

I reviewed quarterly checklists for the emergency response trailers (Appendix L of the plan). On the December 5, 2013 checklist the CWCMO-289 Trailer which provides coverage for all of the CWC was noted as "Out of service. Needs to be restocked." Three months later, on the February 5, 2014 when the M0-289 trailer was next inspected the associated checklist still noted that the trailer was out of service. It appears that the CWC may not have been equipped with the required spill control and decontamination equipment for at least two months.

I reviewed the waste inventory records for the Flammable and Alkali Metal Waste (F-AMW) storage unit and the Outside Areas (OSA) A & B storage units. Storage of dangerous waste for more than one year is prohibited unless the owner/operator can demonstrate that the storage is solely for the purpose of accumulating such quantities of waste as are necessary to facilitate proper recovery, treatment or disposal. I found there were multiple containers of mixed waste that had been stored in these units for more than a year. Specifically, 61 of the 63 containers on the inventory for the F-AMW Unit had been in storage for more than a year. Although the timeframe was different for each container, the container that had been in the F-AMW for the longest had been received into storage on May 28, 1993.

In OSA-A all 164 containers listed in the inventory had been in storage since at least September 28, 2011. Although the timeframe for each container was different, the container that had been in OSA-A the longest had been received in the unit for storage on April 17, 2008. During the onsite inspection of OSA-A Mr. Giles said that there were 122 containers in OSA-A, but the inventory for this unit lists 164 containers.

There were eleven containers listed on the inventory for OSA-B. All eleven containers had been in storage since at least September 17, 2007. However there was one container that was received into storage in the OSA-B on September 18, 2006.

Through the TPA, EPA and Ecology have agreed to allow storage of hazardous waste for which there is no treatment technology, at the Hanford facility, for periods exceeding one year, provided that the waste is on an agreed schedule for treatment to meet LDR standards before 2030. As part of this agreement DOE must file an annual report identifying what waste has been treated and what waste is awaiting treatment. In order to evaluate compliance with the TPA, I requested documentation of the status of waste in storage at the CWC on the date of this inspection.

On May 2, 2014, DOE responded (see Attachment C) to my request for documents related to storage in the CWC. In reviewing that response, I noted that DOE claimed that all the waste in storage at the

U.S. Department of Energy Hanford (CWC))
 RCRA ID # WA7890008967
 RCRA Focused Compliance Inspection Report – April 2014

CWC on December 31, 2013, was included in the January 2014 annual report detailing the status of the waste in the CWC. The response also indicated that for at least 50 containers of waste that were in storage at the CWC for more than one year, at the time of this inspection, treatment technology existed offsite that could have been used to treat the wastes to meet LDR standards.

I reviewed the contingency plan for the CWC. In a note that accompanied the CHPRC response to our record request for this inspection, CHPRC representatives stated that the RCRA contingency plan is "imbedded" into the Building Emergency Plan (BEP) for CWC. It specifies that "Sections 1.5, 3.1, 4.0, 7.1, 7.1.1, 7.1.2, 7.2, 7.2.1, 7.2.2, 7.2.3, 7.2.4,7.2.5, 7.2.5.1, 7.3 8.2, 8.4, 9.0, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 11.0, 12.0, and 13.0 of the BEP are enforceable sections meeting RCRA contingency planning requirements." I reviewed the BEP for CWC. I found that the BEP refers to standards or procedures set out in the Hanford Contingency Management Plan. No copy of this plan was provided.

The regulations require that the contingency plan must contain an evacuation plan which describes evacuation routes and alternative evacuation routes. Instead of having routes identified in the plan, the CWC BEP indicates that evacuation routes will be determined on a case by case basis depending on the situation and communicated to affected staff by radio or bull horns.

The regulations require that the facility emergency plan include a list of all persons that are qualified to act as the emergency coordinator. The BEP states that the building emergency director is the emergency coordinator. The BEP also states that a list of building emergency directors and their work phone number is included in Section 13 of the BEP. I read Section 13 of the BEP. Instead of a current list of names of all persons qualified to act as the emergency coordinator, Section 13 of the BEP has a single general phone number. In case nobody is available to answer the general phone number, a second phone number is given to contact the Hanford Patrol for a list of home phone numbers of building emergency directors.

The regulations require that an owner/operator have a contingency plan at his facility for use in emergencies or sudden or non-sudden releases which threaten human health or the environment. I reviewed the CWC unit group BEP, which as mentioned above, states that it is intended to meet the RCRA contingency plan requirements. In so doing I found that every area and unit group within the Hanford facility is covered by a separate BEP and each BEP has a separate RCRA contingency plan for that unit group or area. There is also a Hanford Contingency Management Plan (HCMP) which covers the whole facility and references the BEPs. In addition to addressing releases of RCRA regulated waste, the HCMP includes procedures for addressing releases of non-RCRA regulated radioactive material and waste. The BEP that I reviewed for the CWC indicated that in order to trigger the implementation of the Contingency Plan for the CWC the incident must occur at the CWC or in transportation related to activities at the CWC. Based on the review of the documents we received, it was very confusing to figure out how all of the contingency plans in the various BEPs and the HCMP fit together to address site wide emergency response that can be implemented immediately in emergency circumstances. For example, it was unclear how the contingency plans under the separate BEPs would work together if an emergency spread beyond the coverage of the initial BEP area into an area covered by a different BEP.



#### **ATTACHMENT A**

**Aerial Photo** 

USDOE Hanford (CWC) WA7890008967 April 2014 RCRA Inspection Report

## bing Maps

My Notes

On the go? Use **m.bing.com** to find maps, directions, businesses, and more





Bird's eye view maps can't be printed, so another map view has been substituted.

### bing Maps

My Notes

On the go? Use **m.bing.com** to find maps, directions, businesses, and more





Bird's eye view maps can't be printed, so another map view has been substituted.

#### **ATTACHMENT B**

Photo Log and Photos

USDOE Hanford (CWC) WA7890008967 April 2014 RCRA Inspection Report

## ATTACHMENT B: HANFORD FACILITY PHOTO LOG WA7 89000 8967

#### **APRIL 2014 RCRA Inspection**

(All photographs were taken by Michael Prescott, EPA Contractor, on 4/1/14 using a Hewlett Packard Model M547 digital camera)

- 1. HPIM4732 View of outside of Bldg. 2401-W showing entrance and spill kits.
- 2. HPIM4733 View of main gate to Central Waste Complex (CWC) and examples of buildings and areas beyond the gate.
- 3. HPIM4734 Overview of HAZMAT buildings in the Flammable and Alkali Metal Waste Storage Area.
- 4. HPIM4735 View of drum of mixed waste in HAZMAT Bldg. FS-02 in the Flammable and Alkali Metal Waste Storage Area.
- 5. HPIM4737 View of drums of mixed waste in HAZMAT Bldg. FS-20 in the Flammable and Alkali Metal Waste Storage Area.
- 6. HPIM4739 View of additional drums of mixed waste in HAZMAT Bldg. FS-20 in the Flammable and Alkali Metal Waste Storage Area.
- 7. HPIM4740 View of two drums of mixed waste in HAZMAT Bldg. FS-17 in Flammable and Alkali Metal Waste Storage Area.
- 8. HPIM4741 View of a tank within additional containment and patched with lead blankets to cover hot spots in Storage Area F.
- 9. HPIM4742 Another view of a tank within additional containment and patched with lead blankets to cover hot spots in Storage Area F.
- 10. HPIM4743 Overview of large boxes of mixed wastes in Storage Area B.
- 11. HPIM4744 Another overview of large boxes of mixed wastes in Storage Area B.
- 12. HPIM4745 Close up view of the labeling on a large box of mixed wastes in Storage Area B.
- 13. HPIM4746 Overview of large boxes of mixed wastes with tarps in Storage Area A.
- 14. HPIM4747 Another overview of large boxes of mixed wastes in Storage Area A.
- 15. HPIM4748 Another overview of large boxes of mixed wastes in Storage Area A.
- 16. HPIM4749 Another overview of large boxes of mixed wastes in Storage Area A.
- 17. HPIM4750 Close-up view of the labeling on the tarp over a large box of mixed wastes in Storage Area A.
- 18. HPIM4751 Another overview of large boxes of mixed wastes in Storage Area A.
- 19. HPIM4752 Another overview of large boxes of mixed wastes with tarps in Storage Area A.
- 20. HPIM4753 View of the large box of mixed wastes (designated as 2312DR-11) in the Northeast Corner of Storage Area A.
- 21. HPIM4754 Another view of a large box of mixed wastes (designated as 2312DR-11) in the Northeast Corner of Storage Area A.
- 22. HPIM4756 Another view of the large box of mixed wastes (designated as 2312DR-11) showing the hoses and jugs for collecting leaking fluids from within the outer secondary containment (lower left section of the box) in the Northeast Corner of Storage Area A.
- 23. HPIM4757 View of an overpack drum of mixed waste in Bldg. 2404-WC in the Waste Receiving and Processing (WRAP) Area.

- 24. HPIM4758 View of a second overpack drum of mixed waste in Bldg. 2404-WC in the WRAP Area.
- 25. HPIM4759 Overview of drums and containers of mixed wastes in Bldg. 2404-WA.
- 26. HPIM4761 Overview of drums of mixed wastes in Bldg. 2403-WA.
- 27. HPIM4762 Overview of additional drums of mixed wastes in Bldg. 2403-WA.
- 28. HPIM4763 Overview of additional drums of mixed wastes in Bldg. 2403-WA.
- 29. HPIM4764 Overview of additional drums of mixed wastes in Bldg. 2403-WA.
- 30. HPIM4765 Overview of drums of mixed wastes in Bldg. 2403-WC.
- 31. HPIM4766 Example view of a drum of mixed wastes showing corrosion at the bottom and with a "Watch Drum" label in Bldg. 2402-WB.
- 32. HPIM4767 View of three additional drums of mixed wastes showing corrosion in Bldg. 2402-WB.
- 33. HPIM4768 Overview of additional drums of mixed wastes showing corrosion in Bldg. 2402-WB.
- 34. HPIM4769 Overview of additional drums of mixed wastes showing corrosion in Bldg. 2402-WB.
- 35. HPIM4770 Overview of additional drums of mixed wastes showing corrosion in Bldg. 2402-WB.
- 36. HPIM4771 Overview of drums of mixed wastes in Bldg. 2402-WF.
- 37. HPIM4772 Overview of containers of mixed wastes in Bldg. 2402-WE.
- 38. HPIM4773 Overview of drums of mixed wastes in Bldg. 2402-WE.
- 39. HPIM4774 Overview of additional drums of mixed wastes in Bldg. 2402-WE.
- 40. HPIM4775 Close-up view of a drum of mixed wastes showing corrosion of the bottom in Bldg. 2402-WE.
- 41. HPIM4776 Overview of drums of mixed wastes in Bldg. 2402-WH.
- 42. HPIM4777 Close-up view of a drum (middle drum) of mixed wastes without a hazardous waste label in Bldg. 2402-WH.
- 43. HPIM4780 Overview of drums of mixed wastes in Bldg. 2402-WI.
- 44. HPIM4781 Overview of drums of mixed wastes in Bldg. 2402-WJ.
- 45. HPIM4782 View of concrete shielding wall that had drums of mixed wastes on the other side of the wall in Bldg. 2402-WL.













HPIM4735.JPG

HPIM4737.JPG











HPIM4739.JPG

HPIM4740.JPG

HPIM4741.JPG

HPIM4742.JPG

HPIM4743.JPG











HPIM4744.JPG

HPIM4745.JPG

HPIM4746.JPG

HPIM4747.JPG

HPIM4748.JPG











HPIM4749.JPG

HPIM4750,JPG

HPIM4751.JPG

HPIM4752.JPG

HPIM4753.JPG











HPIM4754.JPG

HPIM4756.JPG

HPIM4757.JPG

HPIM4758.JPG

HPIM4759.JPG











HPIM4761.JPG

HPIM4763.JPG











HPIM4766.JPG

HPIM4767.JPG

HPIM4768.JPG

HPIM4769.JPG

HPIM4770.JPG







HPIM4772.JPG



HPIM4773,JPG



HPIM4774.JPG



HPIM4775.JPG



HPIM4776.JPG



HPIM4777.JPG



HPIM4780.JPG



HPIM4781.JPG



HPIM4782.JPG

#### **ATTACHMENT C**

Permit Application Part A for CWC Attendance Roster Document Request List Response to Information Request

USDOE Hanford (CWC) WA7890008967 April 2014 RCRA Inspection Report

1	•	WASHI DEPA E C	NGT RTI	ON WE	S T O O	A	T E O F Y		CONTRACTOR AND ADDRESS OF THE PARTY OF THE P	erous \ Form		ste	Pe	rn	nit A	pp	lica	itio	n
Date Rec	eived		Review	ed by:	6	1	10	M		n		Date:	0	9	2	2 2	0	0	8
Month	Day	Year	Approv	ed by:	: /	7	10%		120	evio		Date:	0	9	2	2 2	0	0	8
0 9	1 9	2 0 0 8											KINI KINI						19-1
I. This	s for	n is submitted to	: (plac	e an	"X" in	the	e appr	opriat	e box)				M	y.	N POI		9.0		
	Rec	uest modificatio	n to a	final	status	pe	ermit (c	comme	only ca	lled a "F	art E	3" peri	mit)						
	Rec	uest a change u	nder ir	nterim	n statu	s				(fig ( ban)	Vill	inu		Alles					
		oly for a final stat a permit renewal										al fina	ıl sta	atus	pern	nit fo	ras	ite o	r
	Est	ablish interim sta	atus be	caus	e of th	1e \	wastes	newly	y regul	ated on:		(Date)	)						
	List	waste codes:			7	Ĭ	30											1000	H
II. EP/	A/Sta	te ID Number										dict.			essiya it			8.	
WA	7	8 9 0 0	0 8	9	6 7		W.	1	- 247	INVESTIGATION.				133					
III. Nar	me of	Facility						2/1	\$(JE))		413			20.1	K.		9		
US Dep	artm	ent of Energy - Ha	nford	Facili	ty					_									
IV. Fac A. Stre		ocation (Physic	al add	ress I	not P.C	O. I	Box or	Route	Numb	oer)									
825 Jad	win	The first																	
Cit	y or	Town								State	ZIF	Code	9						
Richlan										WA	993	352							
County C		County Name													6				
0 0	5	Benton		THE STATE OF	×1111					Ŧ						-		u.	ī
B. Land Type	1	Geographic Loca itude (degrees, n		ecs)	Lon	git	ude (d	egree	s, mins	s, secs)		Facili onth		xist Day	ence		аг		
F	Ref	er to TOPO Map	(Sectio	n XV	.)						0	3		0	2	1	9	4	3
V. Fac	cility	Mailing Address					100	Sept.	The state of							87		Y	
Str	eet o	P.O. Box		JEY,				N.I.											
P.O. Bo	x 550									Pag.						1	HTE (		
City	y or 1	own		III L						State	ZII	Code	В		L W.	(III)	the T	ne,	
Richlan	nd							1		WA	993	352							

VI.	Fac	ility	con	tact	t (Per	son to	be contacted regar	ding	waste	activ	itie	s at	t faci	lity)		1775 A.T.		1000				
Nar	ne (la	ast)			I.	10				1920			(fire	it)	N.			am.		140		
Bro	ckma	ın										_	Dav	id								
Job	Title	9			NT.	U L2							Pho	ne l	lumi	er (a	rea c	cod	e an	d nı	ımbe	er)
Maı	nagei	r —				4.1							(509	) 376	5-739	5			i i			
Cor	ıtact	Add	res	S			or a re-	IA. I				m			111		" Ec					
S	tree	t or F	2.0.	Во	X		STAURSIEM		B.M. MIC		27,000		11-72									
P.O	. Box	550	1	V																		
C	ity c	or To	wn			18							Stat	te	ZIP	Cod	е					
Ricl	nland	l											WA		993	52						
VII.	Fac	ility	Ope	erate	or Inf	ormat	ion		9 11 9		etje e.											
A.	Nam	10	Щ				ali i de de la co			Ш							Ph	one	Nu	mbe	r	
							perator		_										76-7			
						ediatio	n CompanyCo-Opera	tor fo	r Centi	ral W	aste	e Co	omple	2X*			[ (50	9) 3	76-0	556*		
_	. Box	t or F	·.U.	DU	X																	
		1600	*																			
C	ity o	r To	wn								S	tate	9	ZIF	Coc	de	P					
Rich	nland	l									N	۷A		993	352							
В.	Ope	rator	Ту	ре		F		8 -							W 45		Ц		AVI	14, 2		
C. I	Does	the	nan	ne ir	n VII.	A refle	ect a proposed chan	ge in	operat	or?		T	Y	es	M	No	Co-	<u>—</u> -Ор	erato	or* cl	hang	e ge
					lf y	es, pro	vide the scheduled da	te for	the cha	nge:	M	lon	th		Da	y				ear	Ļ	
		4									Ŀ	1	0		0	1		2	<u> </u>	0	0	8
D.	is th	e na	me	liste	ed in	VII.A.	also the owner? If y	es, s	kip to	Secti	on '	VIII	.C.						Yes		No	,
VIII.	Fac	ility	Ow	ner	Infor	matio	1			. 4											181	
A.	Nam	10			70000						Р	hor	ne Nu	ımbe	er (ar	ea c	ode a	and	nun	ıber	)	
Dav	id A	. Bro	ckm	ıan,	Oper	ator/F	acility-Property Own	er			(5	509)	376-	7395								
	Stre	et or	P.C	). B	ох					y						8.	П			ШХ		
P.O	. Box	550																				
	City	or T	IWO	1							S	tate	•	ZIF	Co	de		<b>11</b>	đ			
Ric	ıland	I									N	۷A		993	352							
В.	Own	er Ty	ype			F								Ľ								
C.	Doe	s the	na	me	in VII	I.A ref	lect a proposed cha	nge i	n owne	er?			Y	es	X	No						
					If yes	, provi	de the scheduled date	for th	e chan	ge:	M	lon	th	ya	Da	y	, 13 july 1		Y	ear		
																L.		L		_		
IX.			od	es (	5/6 d	igit co	des)	SERVICE SERVICE	1								ī, m					
	First			ı				В.	Seco		-	T		Α	dmini	stratio	n of A	ir Ar	Wate	r Reer	nitce	&
5	6	2	2	1		Waste	Treatment & Disposal	9	2	4	1	1	0				anage					
	Thir	d	les.	-		Researc	h & Development in the	D,	Fourt	h	Т	Т										1
5	4	1	7	1	1		1. Engineering & Life Sciences		1		1			- 1								

A. F	ermit	Туре	8.	Permi	it Nur	nber									C. Description
-16	Е		Α	Ī	R		0	6	-	1	0	1	9		WAC 246-247, NOC Radioactive Air
	E		D	E-	0 1	0	N	w	P-	0	0	2	R	1	WAC 173-400, General Regulations for Air Pollution Sources/WAC 173-460, Controls for New Sources of Toxic Air Pollutants
				L										T	
	MIRE			L,					- 4			17			E 70 - 70 E

XI. Nature of Business (provide a brief description that includes both dangerous waste and non-dangerous waste areas and activities)

The Central Waste Complex (CWC) began waste management operations in August of 1988. The CWC, located in the 200 West Area provides storage for dangerous, and/or mixed waste generated on or off the Hanford Facility

T04 (Treatment – Other) Treatment can consist of, deactivation (neutralization, cementing, absorption), stabilization (cementing, absorption, and encapsulation), compaction, sorting, and repackaging of waste.

Revison 8, October 1, 2008

EXAMPLE FOR COMPLETING ITEMS XII and XIII (shown in lines numbered X-1, X-2, and X-3 below): A facility has two storage tanks that hold 1200 gallons and 400 gallons respectively. There is also treatment in tanks at 20 gallons/hr. Finally, a one-quarter acre area that is two meters deep will undergo in situ vitrification.

Щ	Se	ectic	on X	II. P	rocess Codes Capacities	and Desi	gn				S	ecti	ion XIII. Oth	er Proces	ss Codes	
					B. Process Capaci	Design ty	C.						B Process Capa	s Design city	C.	THE SE
	ine mber		A, roce Code ter co	8	1. Amount	2. Unit of Measure (enter code)	Proces s Total Number of Units		ine mber		A. roce Code ter co	98	1. Amount	2. Unit of Measure (enter code)	Process Total Number of Units	D. Process Description
x	1	s	0	2	1,600	G	002	х	1	Т	0	4	700	С	001	In situ vitrification
х	2	Т	0	3	20	E	001									
X	3	Т	0	4	700	С	001									
	1	s	0	1	20,796,400	L	050		1							
	2	Т	0	4	45,420	V	019		2							_
	3	П							3							
	4				-				4							
	5	П				-			5							
	6								6							
	7								7							
	8		Г		11				8							
	9								9							
1	0							1	0							
1	1							1	1							
1	2							1	2							
1	3							1	3							
1	4							1	4							
1	5							1	5							
1	6							1	6							
1	7							1	7							
1	8							1	8							
1	9							1	9							
2	0							2	0							
2	1							2	1							
2	2							2	2							
2	3							2	3				,			
2	4							2	4							
2	5							2	5							

#### XIV. Description of Dangerous Wastes

Example for completing this section: A facility will receive three non-listed wastes, then store and treat them on-site. Two wastes are corrosive only, with the facility receiving and storing the wastes in containers. There will be about 200 pounds per year of each of these two wastes, which will be neutralized in a tank. The other waste is corrosive and ignitable and will be neutralized then blended into hazardous waste fuel. There will be about 100 pounds per year of that waste, which will be received in bulk and put into tanks.

H.						B. Estimated	= 10.00						D	Pro	C05508	
N	Line umber			gero: e No.		Annual Quantity of Waste	C. Unit of Measure			(1)	Pro	cess	Cod	08	S.	(2) Process Description [If a code is not entered in D (1)]
X	1	ם	0	0	2	400	P	S	0	1	T	0	1			
X	2	D	0	0	1	100	Р	S	0	2	T	0	1			
X	3	D	0	0	2											Included with above
	1	D	0	0	1	20,000	K	S	0	1	Т	0	4	=(1)		Includes Debris
	2	D	0	0	2	15,000	K	S	0	1	Т	0	4	TI.		Includes Debris
	3	D	0	0	3	500	K	S	0	1	T	0	4			Includes Debris
	4	D	0	0	4	50	K	S	0	1	Т	0	4		_	Includes Debris
Ļ	5	D	0	0	5	400	K	S	0	1	T	0	4			Includes Debris
b	6	D	0	0	6	117	K	s	0	1	Т	0	4			Includes Debris
	7	D	0	0	7	400	K	S	0	1	T	0	4			Includes Debris
k	8	D	0	0	8	400	- K	S	0	1	Т	0	4			Includes Debris
	9	D	0	0	9	800	K	s	0	1	Т	0	4			Includes Debris
	10	D	0	1	0	10	K	S	0	1	Т	0	4			Includes Debris
I	11	D	0	1	1	20	K	s	0	1	Т	0	4	-		Includes Debris
T	12	D	0	1	2	300	K	S	0	1	T	0	4			Includes Debris
Į	13	D	0	1	3	300	K	S	0	1	Т	0	4			Includes Debris
I	14	D	0	1	4	300	K	S	0	1	T	0	4			Includes Debris
	15	D	0	1	5	300	K	S	0	1	T	0	4			Includes Debris
I	16	D	0	1	6	300	K	S	0 -	1	Т	0	4			Includes Debris
Ī	17	D	0	1	7	300	K	S	0_	1	Т	0	4			Includes Debris
	18	D	0	1	8	300	K	s	0	1	Т	0	4			Includes Debris
	19	D	0	1	9	300	K	S	0	1	Т	0	4			Includes Debris
Ţ	20	D	0	2	0	300	- K	S	0	1	Т	0	4			Includes Debris
	21	D	0	2	1	300	K	S	0	1	Т	0	4		=	Includes Debris
	22	D	0	2	2	300	K	S	0	1	Т	0	4	ΙΞ		Includes Debris
	23	D	0	2	3	300	K	S	0	1	Т	0	4			Includes Debris
	24	D	0	2	4	300	K	S	0	1	Т	0	4			Includes Debris
	25	D	0	2	5	300	K	s	0	1	Т	0	4			Includes Debris

EPA/State ID Number   W   A   7   1	8 9 0	0 0 1	B 9 6	7
-------------------------------------	-------	-------	-------	---

Line	A	Dan	1		B. Estimated Annual	C. Unit of		M)		A.		D.	Pro	)C <b>05</b> 1	3	
Number		Vast			Quantity of Waste	Measure			(1)	Pro	cess	Coc	les			(2) Process Description [If a code is not entered in D (1)]
26	D	0	2	6	300	K	s	0	1	Т	0	4				Includes Debris
27	D	0	2	7	300	K	S	0	1	T	0	4				Includes Debris
28	D	0	2	8	300	K	S	0	1	T	0	4				Includes Debris
29	D	0	2	9	300	K	S	0	1	T	0	4				Includes Debris
30	D	0	3	0	300	K	S	0	1	Т	0	4				Includes Debris
31	Ď	0	3	1	300	K	S	0	1	T	0	4				Includes Debris
32	D	0	3	2	300	K	S	0	1	T	0	4				Includes Debris
33	D	0	3	3	300	K	S	0	1	T	0	4				Includes Debris
34	D	0	3	4	300	K	S	0	1	Т	0	4				Includes Debris
35	D	0	3	5	300	K	S	0	1	T	0	4				Includes Debris
36	D	0	3	6	300	K	S	0	1	Т	0	4				Includes Debris
37	D	0	3	7	300	K	S	0	1	Т	0	4				Includes Debris
38	D	0	3	8	300	K	S	0	1	T	0	4				Includes Debris
39	D	0	3	9	300	K	S	0	1	T	0	4				Includes Debris
40	D	0	4	0	300	K	S	0	1	T	0	4				Includes Debris
41	D	0	4	1	300	K	S	0	1	T	0	4				Includes Debris
42	D	0	4	2	300	K	S	0	1	Т	0	4				Includes Debris
43	D	0	4	3	300	K	S	0	1	T	0	4				Includes Debris
44	W	S	С	2	15,000	K	S	0	1	T	0	4				Includes Debris
45	W	Т	0	1	16,000	K	S	0	1	T	0	4				Includes Debris
46	W	Т	0	2	22,000	K	S	0	1	Т	0	4				Includes Debris
47	W	P	0	1	12,000	K	S	0	1	Т	0	4				Includes Debris
48	W	P	0	2	3,000	K	S	0	1	T	0	4				Includes Debris
49	W	P	0	3	2,000	K	S	0	1	T	0	4				Includes Debris
50	W	P	C	В	5,000	K	S	0	1	T	0	4				Includes Debris
51	F	0	0	1	4,000	К	S	0	1	T	0	4				Includes Debris
52	F	0	0	2	4,500	K	S	0	1	T	0	4				Includes Debris
53	F	0	0	3	6,500	K	S	0	1	Т	0	4				Includes Debris
54	F	0	0	4	570	K	S	0	1	T	0	4				Includes Debris
55	F	0	0	5	6,000	K	S	0	1	T	0	4				Includes Debris
56	F	0	0	6	6,000	K	S	0	1	T	0	4				Includes Debris
57	F	0	0	7	6,000	K	S	0	1	T	0	4				Includes Debris
58	F	0	0	8	6,000	K	S	0	1	T	0	4				Includes Debris
59	F	0	0	9	6,000	K	S	0	1	T	0	4				Includes Debris
60	F	0	1	0	6,000	K	S	0	1	T	0	4				Includes Debris
61	F	0	1	1	6,000	K	s	0	1	Т	0	4				Includes Debris

Continuation	on of	Se	ctio	n XI	V. Descriptio	n of Dange	erou	s W	ast	e.		Page 18			. V	
62	F	0	1	2	6,000	∥ K	S	0	1	Т	0	4				Includes Debris
63	F	0	1	9	6,000	K	S	0	1	T	0	4				Includes Debris
64	F	0	2	0	300	K	S	0	1	Т	0	4				Includes Debris
65	F	0	2	1	300	K	S	0	1	T	0	4				Includes Debris
66	F	0	2	2	300	K	S	0	1	T	0	4				Includes Debris
67	F	0	2	3	300	K	S	0	1	Т	0	4		,		Includes Debris
68	F	0	2	6	300	K	S	0	1	Т	0	4				Includes Debris
69	F	0	2	7	500	K	S	0	1	T	0	4				Includes Debris
70	F	0	2	8	300	K	S	0	1	Т	0	4				Includes Debris
71	F	0	3	9	500	K	S	0	1	Т	0	4				Includes Debris
72	P	0	0	7	500	K	S	0	1	Т	0	4				Includes Debris
73	Ū	0	0	1	5,000	K	S	0	1	Т	0	4				Includes Debris
74	U	0	0	2	5,000	K	S	0	1.	Т	0	4				Includes Debris
75	U	0	0	3	5,000	K	S	0	1	Т	0	4				Includes Debris
76	U,	0	0	4	5,000	K	s	0	1	Т	0	4				Includes Debris
77	U	0	0	5	5,000	K	S	0	1	Т	0	4				Includes Debris
78	U	0	0	6	5,000	K	S	0	1	Т	0	4				Includes Debris
79	U	0	0	7	5,000	K	S	0	1	Т	0	4				Includes Debris
80	Ų	0	0	8	5,000	K	S	0	1	Т	0	4	Ш			Includes Debris
81	U	0	0	9	5,000	K	S	0	1	Т	0	4	Ш			Includes Debris
82	U	0	1	0	5,000	K	S	0	1	T	0	4	0			Includes Debris
83	U	0	1	1	5,000	K	S	0	1	Т	0	4				Includes Debris
84	U	0	1	2	5,000	K	S	0	1	Т	0	4			_	Includes Debris
85	Ų	0	1	4	5,000	K	S	0	1	Т	0	4				Includes Debris
86	U	0	<b>1</b>	5	5,000	K	s	0	1	T	0	4				Includes Debris
87	U	0	1	6	5,000	K	s	0	1	Т	0	4				Includes Debris
88	U	0	_1_	7	5,000	K	s	0	1	Т	0	4				Includes Debris
89	U	0	1	8	5,000	K	s	0	1	Т	0	4				Includes Debris
90	U	0	1	9	5,000	K	s	0	1	Т	0	4	7771		$\Box$	Includes Debris
91	U	0	2	0	5,000	K	S	0	1	T	0	4			$\Box$	Includes Debris
92	U	0	2	1	5,000	K	S	0	1	Т	0	4			_	Includes Debris
93	U	0	2	2	5,000	K	S	0	1	Т	0	4		$\square$	_	Includes Debris
94	U	0	2	3	5,000	K	S	0	1	Т	0	4		Ш		Includes Debris
95	Ū	0	2	4	5,000	K	S	0	1	Т	0	4			$\Box$	Includes Debris
96	U	0	2	5	5,000	K	S	0	1	Т	0	4			_[	Includes Debris
97	U	0	2	6	5,000	K	s	0	1	Т	0	4			$\perp$	Includes Debris
98	U	0	2	7	5,000	K	s	0	1	Т	0	4	П			Includes Debris
99	U	0	2	8	5,000	K	S	0	1	Т	0	4				Includes Debris

EPA/State ID Number	w	A	7	8	9	0	0	0	8	9	6	7	
---------------------	---	---	---	---	---	---	---	---	---	---	---	---	--

Continuation of Section XIV. Description of Dangerous Waste S 0 1 T 0 4 2 5.000 100 K **Includes Debris** S 0 T U 3 0 5.000 1 0 4 101 0 K **Includes Debris** S U 0 3 1 5,000 0 1 T 0 4 102 K **Includes Debris** U 3 2 S 0 T 0 5,000 1 0 4 103 K **Includes Debris** S 0 T 0 U 0 3 3 5,000 1 4 104 K Includes Debris S T U 0 3 4 5.000 0 0 4 105 K 1 **Includes Debris** 106 U 0 3 5 5,000 K S 0 1 T 0 4 Includes Débris S 107 U 0 3 6 5,000 0 1 T 0 4 K **Includes Debris** S U 3 7 5,000 0 T 0 4 108 0 K 1 **Includes Debris** S Т U 0 3 8 0 0 4 109 5.000 K 1 **Includes Debris** S U 0 3 9 5.000 0 1 T 0 4 110 K Includes Debris U 4 S 0 T 0 4 111 0 1 5.000 1 K Includes Debris S 0 U 2 T 0 4 112 0 4 5,000 1 K Includes Debris S U 0 4 3 0 T 0 4 5,000 1 113 K Includes Debris S 0 T 4 114 U 0 4 4 5,000 K 1 0 Includes Debris U 0 4 5 5,000 S 0 1 T 0 4 115 K **Includes Debris** S 0 T 4 116 U 0 4 6 5,000 K 1 0 **Includes Debris** 7 S 0 T U 0 4 5,000 K 1 0 4 117 Includes Debris S 118 U 0 4 8 5,000 K 0 1 T 0 4 Includes Debris U 0 4 9 5,000 K S 0 T 0 4 1 119 **Includes Debris** S 5 0 K 0 1 T 0 4 U 0 5,000 120 **Includes Debris** U 0 5 K S 0 T 0 4 1 5,000 1 121 Includes Debris 2 K S 0 T 122 U 0 5 5,000 1 0 4 **Includes Debris** U 0 5 3 5,000 K S 0 1 T 0 4 123 **Includes Debris** 5 K S 0 1 T U 0 5 5,000 0 4 124 **Includes Debris** U 0 5 6 5,000 K S 0 T 0 4 1 125 **Includes Debris** 7 S T 126 U 0 5 5,000 K 0 1 0 4 **Includes Debris** 0 5 8 K S 0 T 0 4 127 U 5,000 1 **Includes Debris** S T K 0 1 0 4 5.000 128 U 0 5 9 Includes Debris S T U 0 6 0 0 1 0 4 5.000 K 129 Includes Debris S T K 0 1 0 4 130 U 0 6 1 5,000 **Includes Debris** 2 S T U 0 6 5,000 K 0 1 0 4 131 Includes Debris 3 K S 0 1 T 4 U 0 6 5,000 0 132 Includes Debris K S 0 1 T U 0 6 4 5.000 0 4 133 **Includes Debris** S T 0 6 5,000 K 0 1 0 4 134 U 6 **Includes Debris** 135 U 0 6 7 5,000 K S 0 1 T 0 4 **Includes Debris** S T U 0 6 8 5,000 K 0 1 0 4 136 Includes Debris S K T U 0 6 9 5,000 0 1 0 137 4 Includes Debris

EPA/State ID Number   W   A   7   8   9   0   0   0   8   9   6   1
---

Continuation of Section XIV. Description of Dangerous Waste Т 0 4 5.000 S 0 1 U 7 0 K 138 0 Includes Debris 7 S T U 0 5,000 K 0 1 0 4 1 139 Includes Debris 7 2 K S T 140 U 0 5,000 0 1 0 4 Includes Debris S U 0 7 3 5,000 K 0 1 T 0 4 141 Includes Debris K S T U 7 5,000 0 1 0 4 0 4 142 Includes Debris U 7 5 K S 0 1 T 0 4 143 0 5,000 Includes Debris S T 144 U 0 7 6 5,000 K 0 1 0 4 Includes Debris S 7 K 1 T 0 4 145 U 0 7 5,000 0 **Includes Debris** S Т 0 U 0 7 8 5,000 K 0 1 4 146 **Includes Debris** S Т 147 U 0 7 9 5,000 K 0 1 0 4 Includes Debris S K Т U 0 8 0 5.000 0 1 0 4 148 Includes Debris U 0 8 1 K S 0 1 Т 0 4 5,000 149 Includes Debris S U 2 K 0 1 T 0 4 0 8 5,000 150 Includes Debris S 0 8 3 K 0 1 T 0 4 U 5,000 151 Includes Debris S 1 T 4 U 0 8 4 5,000 K 0 0 152 **Includes Debris** U 0 8 5 5,000 K S 0 1 T 0 4 153 **Includes Debris** S T 0 4 U 0 8 6 5,000 K 0 1 154 **Includes Debris** S T 8 7 K 0 1 0 4 155 U 0 5,000 Includes Debris S U 0 8 8 5,000 K 0 1 T 0 4 156 Includes Debris 9 S 1 T 0 4 U 0 8 5,000 K 0 157 **Includes Debris** S 1 T 9 K 0 0 4 U 0 0 5,000 158 Includes Debris S T U 0 9 K 0 1 0 4 159 1 5,000 **Includes Debris** S 1 T U 0 9 5,000 K 0 0 4 160 Includes Debris 3 K S 0 1 T 4 U 0 9 5,000 0 161 Includes Debris S Т 0 1 4 U 9 4 5,000 K 0 0 162 Includes Debris S T 4 U 0 9 5 K 0 1 0 163 5,000 Includes Debris U 0 9 6 5,000 K S 0 1 T 0 4 164 Includes Debris S 165 U 0 9 5,000 K 0 1 T 0 4 **Includes Debris** S Т 166 U 0 9 8 5,000 K 0 1 0 4 Includes Debris S T 167 U 0 9 9 5.000 K 0 1 0 4 **Includes Debris** K S 0 1 Т 0 U 1 0 1 5.000 4 168 **Includes Debris** S 2 K 0 1 T 0 U 1 0 5,000 4 169 Includes Debris S K 0 1 T U 1 0 3 5000 0 4 170 Includes Debris K S 0 T 0 U 1 0 5 5,000 1 4 171 Includes Debris U 1 0 6 5,000 K S 0 1 T 0 4 172 Includes Debris U 7 5,000 K S 0 1 T 0 4 1 0 173 Includes Debris U 5,000 K S 0 T 0 4 1 0 8 1 174 Includes Debris U 1 0 9 5,000 K S 0 1 T 0 4 175 Includes Debris

Continuation	on o	f Se	ctic	n X	V. Descriptio	n of Dange	erol	s V	ast	e					
176	U	1	1	0	5,000	K	S	0	1	Т	0	4			Includes Debris
177	U	1	1	1	5,000	K	S	0	1	T	0	4			Includes Debris
178	U	1	1	2	5,000	K	S	0	1	Т	0	4			Includes Debris
179	Ų	1	1	3	5,000	K	S	0	1	T	0	4			Includes Debris
180	ט	1	1	4	5,000	K	S	0	1	Т	0	4			Includes Debris
181	U	1	1	5	5,000	K	S	0	1	Т	0	4			Includes Debris
182	U	1	1	6	5,000	K	S	0	1	T	0	4			Includes Debris
183	U	1	1	7	5,000	K	S	0	1	Т	0	4			Includes Debris
184	U	1	1	8	5,000	K	S	0	1	Т	0	4			Includes Debris
185	U	1	1	9	5,000	K	S	0	1	Т	0	4			Includes Debris
186	U	1	2	0	5,000	K	s	0	1	Т	0	4			Includes Debris
187	U	1	2	1	5,000	K	s	0	1	T	0	4			Includes Debris
188	U	1	2	2	5,000	K	S	0	1	Т	0	4			Includes Debris
189	U	1	2	3	5,000	K	S	0	1	Т	0	4			Includes Debris
190	U	1	2	4	5,000	K	s	0	1	T	0	4			Includes Debris
191	Ų	1	2	5	5,000	K	S	0	1	T	0	4			Includes Debris
192	U	1	2	6	5,000	K	S	0	1	T	0	4			Includes Debris
193	Ū	1	2	7	5,000	K	s	0	1	Т	0	4			Includes Debris
194	U	1	2	8	5,000	K	S	0	1	T	0	4			Includes Debris
195	Ų	1	2	9	5,000	K	S	0	1	Т	0	4			Includes Debris
196	U	1	3	0	5,000	K	s	0	1	Т	0	4			Includes Debris
197	U	1	3	1	5,000	K	s	0	1	Т	0	4			Includes Debris
198	U	1	3	2	5,000	K	s	0	1	Т	0	4			Includes Debris
199	U	1	3	3	5,000	K	S	0	1	T	0	4			Includes Debris
200	U	1	3	4	5,000	K	S	0	1	T	0	4			Includes Debris
201	U	1	3	5	5,000	K	s	0	1	Т	0	4			Includes Debris
202	U	1	3	6	5,000	K	S	0	1	Т	0	4			Includes Debris
203	U	1	3	7	5,000	K	S	0	1	Т	0	4			Includes Debris
204	U	1	3	8	5,000	K	s	0	1	Т	0	4			Includes Debris
205	U	1	4	0	5,000	K	S	0	1	T	0	4	П		Includes Debris
206	U	1	4	1	5,000	K	S	0	1	Т	0	4			Includes Debris
207	U	1	4	2	5,000	K	S	0	1	T	0	4			Includes Debris
208	U	1	4	3	5,000	K	S	0	1	Т	0	4			Includes Debris
209	U	1	4	4	5,000	K	S	0	1	Т	0	4	П		Includes Debris
210	U	1	4	5	5,000	K	S	0	1	Т	0	4			Includes Debris
211	U	1	4	6	5,000	K	S	0	1	T	0	4			Includes Debris
212	U	1	4	7	5,000	K	S	0	1	T	0	4			Includes Debris
213	U	1	4	8	5,000	K	S	0	1	Т	0	4	П		Includes Debris

Continuati	on o	f Se	ctio	n XI	V. Descriptio	n of Dange	eroL	ıs W	/ast	е					
214	U	1	4	9	5,000	K	S	0	1	Т	0	4			Includes Debris
215	U	1	5	0	5,000	K	S	0	1	Т	0	4	11(1)		Includes Debris
216	U	1	5	1	5,000	K	S	0	1	Т	0	4			Includes Debris
217	U	1	5	2	5,000	K	S	0	1	T	0	4			Includes Debris
218	U	1	5	3	5,000	K	S	0	1	Т	0	4			Includes Debris
219	U	1	5	4	5,000	K	S	0	1	Т	0	4	11		Includes Debris
220	U	1	5	5	5,000	K	S	0	1	Т	0	4	IIII		Includes Debris
221	U	1	5	6	5,000	K	S	0	1	Т	0	4		$\Box$	Includes Debris
222	U	1	5	7	5,000	K	S	0	1	Т	0	4			Includes Debris
223	U	1	5	8	5,000	K	S	0	1	Т	0	4			Includes Debris
224	U	1	5	9	5,000	K	S	0	1	Т	0	4	1111		Includes Debris
225	U	1	6	0	5,000	K	s	0	1	Т	0	4			Includes Debris
226	U	1	6	1	5,000	K	S	0	1	Т	0	4			Includes Debris
227	U	1	6	2	5,000	K	S	0	1	Т	0	4	Щ		Includes Debris
228	U	1	6	3	5,000	K	s	0	1	T	0	4			Includes Debris
229	U	1	6	4	5,000	K	s	0	1	Т	0	4	1//		Includes Debris
230	U	1	6	5	5,000	K	S	0	1	Т	0	4	(1)		Includes Debris
231	U	1	6	6	5,000	K	s	0	1	Т	0	4			Includes Debris
232	U	1	6	7	5,000	K	S	0	1	T	0	4	ÇΠ		Includes Debris
233	U	1	6	8	5,000	K	S	Ó	1	Т	0	4			Includes Debris
234	U	1	6	9	5,000	K	S	0	1	Т	0	4	117		Includes Debris
235	U	1	7	0	5,000	K	S	0	1	Т	0	4			Includes Debris
236	U	1	7	1	5,000	K	s	Ó	1	Т	0	4			Includes Debris
237	U	1	7	2	5,000	K	S	0	1	Т	0	4	Пп		Includes Debris
238	U	1	7	3	5,000	K	S	0	1	Т	0	4	1111		Includes Debris
239	U	1	7	4	5,000	K	S	0	1	T	0	4			Includes Debris
240	Ū	1	7	6	5,000	K	s	0	1	T	0	4			Includes Debris
241	U	1	7	7	5,000	K	s	0	1	Т	0	4	Щ		Includes Debris
242	U	1	7	8	5,000	K	S	0	1	Т	0	4	Ш		Includes Debris
243	U	1	7	9	5,000	K	S	0	1	Т	0	4			Includes Debris
244	U	1	8	0	5,000	K	S	0	1	T	0	4	Ш		Includes Debris
245	U	1	8	1	5,000	K	s	0	1	Т	0	4			Includes Debris
246	U	1	8	2	5,000	K	S	0	1	Т	0	4	Ш		Includes Debris
247	U	1	8	3	5,000	K	S	0	1	Т	0	4			Includes Debris
248	U	1	8	4	5,000	K	S	0	1	Ţ	0	4			Includes Debris
249	U	1	8	5	5,000	K	S	0	1	T	0	4	Ш		Includes Debris
250	U	1	8	6	5,000	K	s	0	1	T	0	4			Includes Debris
251	U	1	8	7	5,000	K	s	0	1	T	0	4			Includes Debris

Continuation of Section XIV. Description of Dangerous Waste 0 U 1 8 8 5,000 S 0 1 T 4 252 K Includes Debris S 8 9 T U 5,000 0 1 0 4 253 1 K **Includes Debris** S U 1 9 0 5,000 0 1 T 0 4 254 K Includes Debris S T U 1 9 1 5,000 0 1 0 4 255 K Includes Debris S T U 1 9 2 5,000 0 1 0 4 256 K Includes Debris U 9 S T 1 3 5.000 0 1 0 4 257 K **Includes Debris** S U 1 9 4 5,000 K 0 1 T 0 4 258 **Includes Debris** S U 1 9 6 5.000 K 0 1 T 0 4 259 **Includes Debris** S U 9 7 0 1 T 0 260 1 5,000 K 4 **Includes Debris** S U 2 0 0 0 1 T 0 4 261 5,000 K Includes Debris S U 2 0 1 5,000 0 1 Т 0 4 262 K **Includes Debris** U 2 2 S T 0 5.000 0 1 0 4 263 K Includes Debris S U 2 3 1 T 0 0 5,000 0 4 264 K Includes Debris U 2 0 S T 4 5,000 0 1 0 4 265 K Includes Debris S 266 U 2 0 5 5,000 K 0 1 Ţ 0 4 **Includes Debris** U 2 0 6 5,000 S 0 1 T 0 4 267 K **Includes Debris** 5,000 S U 2 0 7 0 1 T 0 4 268 K Includes Debris S U 2 0 8 0 1 T 0 4 269 5,000 K Includes Debris S 270 U 2 0 9 5,000 0 1 T 0 4 K Includes Debris U 2 1 0 S 0 1 T 0 4 5,000 271 K Includes Debris U 2 S 0 1 T 0 1 1 5,000 4 272 K Includes Debris U 2 1 3 S 0 1 T 0 4 5,000 273 K **Includes Debris** 2 S 0 T 0 274 U 1 4 5,000 K 1 4 Includes Debris U 2 1 5 S 0 1 T 0 4 5,000 K 275 Includes Debris S T U 2 0 1 0 1 5,000 4 276 6 K Includes Debris U 2 1 7 S 0 T 0 5,000 1 4 277 K Includes Debris S 278 U 2 1 8 5,000 K 0 1 T 0 4 Includes Debris U 2 9 S 0 T 279 1 5,000 K 1 0 4 **Includes Debris** S T U 2 2 0 1 0 0 5,000 4 280 K Includes Debris 2 U 2 S T 1 5.000 0 1 0 4 281 K **Includes Debris** U 2 2 S 1 T 282 5,000 K 0 0 4 **Includes Debris** 2 S U 2 3 0 1 T 0 4 283 5,000 K **Includes Debris** 2 2 S 0 1 T U 5 0 4 284 5,000 K Includes Debris U 2 2 S 1 T 6 0 0 4 285 5,000 K **Includes Debris** S U 2 2 7 0 1 T 0 4 286 5,000 K **Includes Debris** 287 U 2 2 8 5,000 S 0 1 T 0 4 K **Includes Debris** U 2 S T 3 1 0 1 0 4 288 5,000 K **Includes Debris** 2 S T U 3 2 0 1 0 289 5,000 4 K Includes Debris EPA/State ID Number | W | A | 7 | 8 | 9 | 0 | 0 | 0 | 8 | 9 | 6 | 7

Continuation	on o	f Se	ctio	n XI	V. Descriptio	n of Dange	erou	s W	ast	е					
290	U	2	3	3	5,000	K	S	0	1	Т	0	4			Includes Debris
291	U	2	3	4	5,000	K	S	0	1	Т	0	4			Includes Debris
292	Ū	2	3	5	5,000	K	S	0	1	Т	0	4			Includes Debris
293	U	2	3	6	5,000	K	S	0	1	Т	0	4			Includes Debris
294	U	2	3	7	5,000	K	S	0	1	Т	0	4			Includes Debris
295	U	2	3	8	5,000	K	S	0	1	Т	0	4			Includes Debris
296	U	2	3	9	5,000	K	S	0	1	Т	0	4			Includes Debris
297	U	2	4	0	5,000	K	S	0	1	Т	0	4			Includes Debris
298	U	2	4	3	5,000	K	S	0	1	Т	0	4			Includes Debris
299	U	2	4	4	5,000	K	S	0	1	Т	0	4			Includes Debris
300	U	2	4	6	5,000	K	S	0	1	Т	0	4			Includes Debris
301	U	2	4	7	5,000	K	S	0	1	Т	0	4			Includes Debris
302	U	2 ,	4	8	5,000	K	s	0	1	T	0	4			Includes Debris
303	Ų	,2	4	9	5,000	K	S	0	1	Т	0	4			Includes Debris
304	U	2	7	1	5,000	K	s	0	1	T	0	4			Includes Debris
305	U	2	7	8	5,000	K	s	0	1	Т	0	4			Includes Debris
306	U	2	7	9	5,000	K	s	0	1	Т	0	4			Includes Debris
307	U	2	8	0	5,000	K	S	0	1	Т	0	4			Includes Debris
308	U	3	2	8	5,000	K	S	0	1	Т	0	4	(1)		Includes Debris
309	U	3	5	3	5,000	K	s	0	1	Т	0	4			Includes Debris
310	U	3	5	9	5,000	K	s	0	1	Т	0	4			Includes Debris
311	U	3	6	4	5,000	K	s	0	1	T	0	4		_	Includes Debris
312	U	3	6	7	5,000	K	s	0	1	Т	0	4			Includes Debris
313	U	3	7	2	5,000	K	s	0	1	Т	0	4			Includes Debris
314	U	3	7	3	5,000	K	s	0	1	T	0	4			Includes Debris
315	U	3	8	7	5,000	K	s	0	1	T	0	4			Includes Debris
316	U	3	8	9	5,000	K	s	0	1	T	0	4	17		Includes Debris
317	U	3	9	4	5,000	K	s	0	1	Т	0	4			Includes Debris
318	Ŭ	3	9	5	5,000	K	s	0	1	T	0	4			Includes Debris
319	U	4	0	1	5,000	K	s	0	1	Т	0	4			Includes Debris
320	U	4	0	2	5,000	K	s	0	1	Т	0	4			Includes Debris
321	บ	4	0	3	5,000	K	s	0	1	Т	0	4		_	Includes Debris
322	υ	4	0	4	5,000	K	S	0	1	Т	0	4			Includes Debris
323	U	4	0	7	5,000	K	S	0	1	T	0	4			Includes Debris
324	U	4	0	9	5,000	K	S	0	1	Т	0	4			Includes Debris
325	U	4	1	0	5,000	K	S	0	1	Т	0	4			Includes Debris
326	U	4	1	1	5,000	K	S	0	1	Т	0	4			Includes Debris
327	P	0	0	1	5,000	K	S	0	1	Т	0	4			Includes Debris

EPA/State ID Number	w	Α	7	8	9	0	0	0	8	9	6	7	
---------------------	---	---	---	---	---	---	---	---	---	---	---	---	--

Continuation of Section XIV. Description of Dangerous Waste 0 4 5.000 S 0 1 T 0 2 328 K Includes Debris S 0 1 T 4 P 3 0 329 0 0 5.000 K Includes Debris S T P 0 0 4 5,000 0 1 0 4 330 K Includes Debris 5 S 0 1 T 0 4 P 0 0 5,000 331 K Includes Debris S 1 T P 0 0 4 0 0 6 5,000 332 K **Includes Debris** S 0 1 T 0 4 P 0 0 8 5,000 333 K Includes Debris S P 0 0 9 5,000 K 0 1 T 0 4 Includes Debris 334 S Т 4 P 0 1 0 5,000 K 0 1 0 **Includes Debris** 335 S T P 5,000 0 1 0 4 336 0 1 1 K **Includes Debris** S Р 0 1 2 5,000 0 1 Т 0 4 337 K **Includes Debris** S 0 1 Т P 0 1 3 5,000 K 0 4 **Includes Debris** 338 P 0 1 4 5.000 S 0 1 Т 0 4 K 339 Includes Debris S P 5 0 1 T 0 4 0 1 5,000 K 340 Includes Debris S P 1 6 5,000 0 1 T 0 4 0 341 K **Includes Debris** 7 S 0 1 T 0 4 342 P 0 1 5,000 K **Includes Debris** P 0 1 8 5,000 K S 0 1 Т 0 4 343 Includes Debris S 0 T 0 344 P 0 2 0 5,000 K 1 4 **Includes Debris** S 2 0 1 Т P 0 1 5,000 0 4 345 K Includes Debris S 0 1 Т 0 4 P 0 2 2 5,000 K 346 **Includes Debris** S P 0 2 3 5,000 0 1 T 0 4 K 347 Includes Debris S 0 T 2 1 0 4 P 0 4 5,000 K 348 Includes Debris S T P 0 2 5,000 0 1 0 4 6 K 349 **Includes Debris** S 4 7 0 1 T 0 P 0 2 5,000 K Includes Debris 350 Т 4 P 0 2 8 5,000 S 0 1 0 K 351 Includes Debris 9 S 0 1 T 0 4 P 0 2 5,000 K 352 Includes Debris P 0 3 0 5,000 S 0 1 T 0 4 K 353 **Includes Debris** S 1 T 354 P 0 3 1 5,000 K 0 0 4 Includes Debris 0 3 3 S 0 1 T 0 4 355 P 5,000 K Includes Debris S 1 T 4 3 0 0 P 0 4 5,000 356 K Includes Debris 3 S 1 T 4 P 0 0 0 6 5.000 357 K **Includes Debris** 7 S 3 1 T 0 4 358 P 0 5,000 K 0 Includes Debris S 1 T P 0 3 8 5,000 K 0 0 4 359 Includes Debris 3 9 S 1 T P 0 5,000 0 0 4 360 K Includes Debris S 0 1 T 0 4 P 0 4 0 5,000 361 K Includes Debris S P 0 1 5,000 0 1 T 0 4 362 4 K Includes Debris S T 363 P 0 4 2 5,000 K 0 1 0 4 Includes Debris S T 0 P 0 3 5,000 0 1 4 364 4 K Includes Debris S T P 0 1 0 4 0 4 4 5,000 365 K Includes Debris

EPA/State ID Number | W | A | 7 | 8 | 9 | 0 | 0 | 0 | 8 | 9 | 6 | 7

					V. Description		-							- 1	_	Tracel   West Dis
366	P	0	4	5	5,000	K	S	0	1	Т	0	4			_	Includes Debris
367	P	0	4	6	5,000	K	s	0	1	T	0	4	Ц	_	_	Includes Debris
368	P	0	4	7	5,000	K	s	0	1	Т	0	4			_	Includes Debris
369	P	0	4	8	5,000	K	s	0	1	Т	0	4				Includes Debris
370	Р	0	4	9	5,000	K	S	0	1	T	0	4			_	Includes Debris
371	P	0	5	0	5,000	K	S	0	1	Т	0	4				Includes Debris
372	P	0	5	1	5,000	K	S	0	1	Т	0	4	Ш		$\Box$	Includes Debris
373	Р	0	5	4	5,000	K	s	0	1	Т	0	4				Includes Debris
374	P	0	5	6	5,000	K	S	0	1	T	0	4				Includes Debris
375	P	0	5	7	5,000	K	S	0	1	Т	0	4				Includes Debris
376	P	0	5	8	5,000	K	S	0	1	Т	0	4				Includes Debris
377	P	0	5	9	5,000	K	S	0	1	T	0	4				Includes Debris
378	P	0	6	0	5,000	K	S	0	1	T	0	4				Includes Debris
379	P	0	6	2	5,000	K	S	0	1	Т	0	4				Includes Debris
380	P	0	6	3	5,000	K	S	0	1	Т	0	4				Includes Debris
381	Р	0	6	4	5,000	K	s	0	1	Т	0	4				Includes Debris
382	Р	0	6	5	5,000	K	s	0	1	Т	0	4				Includes Debris
383	Р	0	6	6	5,000	К	s	0	1	Т	0	4				Includes Debris
384	P	0	6	7	5,000	K	S	0	1	Т	0	4				Includes Debris
385	Р	0	6	8	5,000	К	S	0	1	Т	0	4				Includes Debris
386	Р	0	6	9	5,000	K	s	0	1	Т	0	4				Includes Debris
387	Р	0	7	0	5,000	K	s	0	1	Т	0	4				Includes Debris
388	P	0	7	1	5,000	K	s	0	1	T	0	4				Includes Debris
389	P	0	17	2	5,000	K	S	0	1	Т	0	4				Includes Debris
390	Р	0	7	3	5,000	K	s	0	1	Т	0	4				Includes Debris
391	Р	0	7	4	5,000	K	s	0	1	Т	0	4	П			Includes Debris
392	Р	0	7	5	5,000	K	s	0	1	Т	0	4				Includes Debris
393	Р	0	7	6	5,000	K	s	0	1	Т	0	4				Includes Debris
394	P	0	7	7	5,000	K	s	0	1	Т	0	4				Includes Debris
395	Р	0	7	8	5,000	К	s	0	1	Т	0	4	T <sub>U</sub>			Includes Debris
396	P	0	8	1	5,000	K	S	0	1	Т	0	4				Includes Debris
397	P	0	8	2	5,000	K	S	0	1	Т	0	4				Includes Debris
398	Р	0	8	4	5,000	K	s	0	1	T	0	4	1			Includes Debris
399	Р	0	8	5	5,000	K	s	0	1	Т	0	4	П			Includes Debris
400	Р	0	8	7	5,000	K	s	0	1	Т	0	4				Includes Debris
401	P	0	8	8	5,000	K	S	0	1	Т	0	4	П			Includes Debris
402	P	0	8	9	5,000	K	s	0	1	Т	0	4				Includes Debris
403	Р	0	9	2	5,000	K	s	0	1	Т	0	4	П			Includes Debris

EPA/State ID Number	w	Α	7	8	9	0	0	0	8	9	6	7	
---------------------	---	---	---	---	---	---	---	---	---	---	---	---	--

Continuation of Section XIV. Description of Dangerous Waste T 0 4 9 5,000 S 0 1 P 0 3 **Includes Debris** 404 K S Ţ 9 0 1 0 4 P 0 4 5,000 405 K Includes Debris S T P 0 9 5 5,000 K 0 1 0 4 **Includes Debris** 406 P 9 S 0 1 T 0 4 **Includes Debris** 0 6 5,000 K 407 S T 9 7 0 1 0 4 P 0 5,000 K 408 Includes Debris P 9 S 0 1 T 0 4 0 8 5,000 K Includes Debris 409 S P 0 9 9 5,000 K 0 1 T 0 4 Includes Debris 410 S 0 1 T 0 4 411 P 1 0 1 5,000 K Includes Debris S T 0 0 4 P 2 5.000 1 412 1 0 K Includes Debris S T 0 4 P 1 0 3 5,000 0 1 413 K Includes Debris S T 0 0 P 1 0 4 5,000 K 1 4 Includes Debris 414 S P 1 5 5,000 0 1 T 0 4 0 K Includes Debris 415 5,000 S T P 0 1 0 4 **Includes Debris** 1 0 6 K 416 S T P 1 0 8 5,000 0 1 0 4 417 K **Includes Debris** P 9 S 0 1 T 0 4 418 1 0 5,000 K **Includes Debris** P 1 1 0 5,000 S 0 1 T 0 4 419 K **Includes Debris** S 0 1 T 0 4 420 P 1 1 1 5,000 K Includes Debris P S 0 T 0 4 1 1 2 5,000 1 421 K Includes Debris S 0 T 0 4 422 P 1 1 3 5,000 K 1 **Includes Debris** P 1 1 4 5,000 S 0 1 T 0 4 423 K Includes Debris S 0 1 T 4 P 1 5 5,000 0 1 K 424 Includes Debris 5,000 S 0 T 0 4 P 1 1 1 6 425 K Includes Debris S T 0 4 P 8 0 1 426 1 1 5,000 K **Includes Debris** S T 4 P 1 1 9 5,000 0 1 0 427 K Includes Debris 2 S 0 1 T 0 4 1 0 5,000 K **Includes Debris** 428 S 1 2 5,000 0 1 T 0 4 1 K 429 **Includes Debris** S 0 1 T 0 4 430 1 2 2 5,000 K **Includes Debris** P 1 2 3 S 0 1 T 0 4 431 5,000 K Includes Debris 7 S 0 1 T 0 4 2 5,000 1 432 K Includes Debris S 0 1 T 0 4 Р 1 2 8 5,000 433 K Includes Debris S T 5 0 1 0 4 434 1 8 5,000 K Includes Debris S T 4 P 1 8 8 5,000 K 0 1 0 435 Includes Debris 9 S 0 1 T 0 4 1 8 5,000 436 K Includes Debris 1 9 S 0 1 T 0 4 0 5,000 437 K Includes Debris S T 1 9 1 5,000 0 1 0 4 438 K Includes Debris S T 439 1 9 2 5,000 K 0 1 0 4 Includes Debris S T 0 4 P 1 9 4 5,000 0 1 440 K Includes Debris S P 1 9 5,000 0 1 T 0 6 4 441 K Includes Debris EPA/State ID Number | W | A | 7 | 8 | 9 | 0 | 0 | 0 | 8 | 9 | 6 | 7

442	P	1	9	7	5,000	K	S	0	1	T	0	4			Includes Debris
443	P	1	9	8	5,000	K	S	0	1	T	0	4			Includes Debri
444	P	1	9	9	5,000	K	S	0	1	Т	0	4			Includes Debri
445	P	2	0	1	5,000	K	S	0	1	Т	0	4			Includes Debri
446	P	2	0	2	5,000	K	S	0	1	T	0	4			Includes Debri
447	P	2	0	3	5,000	K	S	0	1	Т	0	4		_	Includes Debri
448	P	2	0	,4∥	5,000	K	S	0	1	T	0	4			Includes Debri
449	P	2	0	5	5,000	K	S	0	1	Т	0	4			Includes Debri
450	P	2	0	5	5,000	K	S	0	1	Т	0	4		_ 11	
451											_			_	
452													Ш		
453															FI + FI FI SI -
454						b a									
455					Vicinity (		- 11		L			П			
456															
457										114					
458							$\perp$						Ш		N 1 = 0
459					100		1 6			31					0)= []
460	Ţ							1							
461	-7								ıii	1711	ш				= = =
462		10					_								II g
463					- 1			-				Ш	Ш		
464													Щ		
465			L	<u> </u>								Ш	Щ		I CHOI
466			L										Щ		<u> </u>
467	$oxed{oxed}$									_					<u>.</u>
468				=			1_			Ξ			Ц		
469													Щ		
470					9 .1		<u> </u>		Ţ	_		$oxed{oxed}$	Щ		
471	100												Щ		
472		_		_									Ц		
473													Щ		
474	$oxed{oxed}$										L	$oxed{oxed}$	Щ		
475								_	_		L	_			
476													Щ		
477				·	1										

#### XV. Map

Attach to this application a topographic map of the area extending to at least one (1) mile beyond property boundaries. The map must show the outline of the facility; the location of each of its existing and proposed intake and discharge structures; each of its dangerous waste treatment, storage, recycling, or disposal units; and each well where fluids are injected underground. Include all springs, rivers, and other surface water bodies in this map area, plus drinking water wells listed in public records or otherwise known to the applicant within % mile of the facility property boundary. The instructions provide additional information on meeting these requirements.

Topographic map is located in the Ecology Library

#### XVI. Facility Drawing

All existing facilities must include a scale drawing of the facility (refer to Instructions for more detail).

#### XVII. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment, recycling, and disposal areas; and sites of future storage, treatment, recycling, or disposal areas (refer to Instructions for more detail).

#### XVIII. Certifications

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Operator Name and Official Title (type or print)	Signature	Date Signed
David A. Brockman, Manager U.S. Department of Energy Richland Operations Office	Dang S. Sharp Go	9/19/08
Co-Operator* Name and Official Title (type or print)	Signature	Date Signed
John G. Lehew, III President and Chief Executive Officer CH2M HILL Plateau Remediation Company	41/	9/2/08

Co-Operator - Address and Telephone Number\*

P.O. Box 1600 Richland, WA 99352 (509) 376-0556

Facility-Property Owner
Name and Official Title (type or print)

David A. Brockman, Manager
U.S. Department of Energy
Richland Operations Office

Signature

Date Signed

9/19/08

Comments	
In Section VII. Facility Operator Information, there is no chain Co-Operator*. The change in Co-Operator* will be effective	nge to DOE as the Facility Owner/Operator; only a change ve October 1, 2008.
	#
1126 1127	

### Central Waste Complex



Typical Large
Flammable and Alkali Metal Waste Storage Modules
93040010-9CN Photo Taken 1993



Typical Smail
Flammable and Alkali Metal Waste Storage Modules
93040010-11CN Photo Taken 1993



Typical Waste Storage Building (2401-W)
90061110-44CN Photo Taken 1990



Photo Taken 1990

Typical Waste Storage Building (2402-W, 2402-WB through 2402-WL) 90061110-26CN



Typical Interior 90061110-10CN

Photo Taken 1990

A	TTENDANCE ROS	STER
Inspection Title: (CHPRC) EPA INSPECTION OF THE CENTE INSPECTION NUMBER: 2014-031		Date: APRIL 1, 2014
AGENCY EPA	NAME JOEL WILLIAMS	LOCATION: CENTRAL WASTE COMPLEX
Name	Name, CO/ORG, and F	
	CO/ORG	Phone Number (s)
Sheila Godfrey	CHPRC/EP	376-6080
	3	

ATT	TENDANCE RO	STER
Inspection Title: (CHPRC) EPA INSPECTION OF THE CENTREA INSPECTION NUMBER: 2014-031	L WASTE COMPLEX	Date: APRIL 1, 2014
AGENCY EPA	NAME JOEL WILLIAMS	LOCATION: CENTRAL WASTE COMPLEX
	ame, CO/ORG, and	
Name	CO/ORG	Phone Number (s)
Jose FWilliam Ja	CHIRC-EC	376-4782
JERRY CAMMONINI	MSA-FIS	376-1554
Tom Pysto	MSA	373 9205
Barban Williams in	DOE-RL	376-2028
Je me Laver	CHPRC	316-7510
Jennita Ollero	MSA	373-0275
Nancy Ware	9 44	372-7912
Michael Ollins	Dez	376 65 36
Michael Prescott	ERA Contrator	703-373-38//
Rather Conqual	ECOLOGIL	509-372-7890
Edward Holbrook	Ecology	509-372-7909
Clifford E. Clark	DOE-PH	509-376-9373
KEVIN SCHANILEC	EPA	206-553-1061
TONY MCKARNS	DOE	509-376-8981
Michael Cleare	WRPS	509-373-082
Fugene Grobs	PNNL	379.2975
Thomas Males MOTT	# - DOE-PASO	509-372-4675
JAMES LYNCH	DOE-ORP	509-376-4170
Brian Dixon	CHPAC - DWFGRS	376-7053
Ed Muster	DOE-PL	373-0462
Jack Beller	EPA	206 553 - 2953
Ax Shattuck	MSA	376-816
AlCaurse	HERC	376-3143
Darren-Boone	CHPRL	372-0891
DAVID BULES	CUPRC	373-1068
LINDA Petersen	CHPRC	373-4200
Poulo Gray	CHPRC-EP	539-0991
Derr. Nester	CHPRC	373-4155
David Andrews	CHPRC	313-0815
Stephanie Johansen	CHPAC	373-1031

### Central Waste Complex



Typical Waste Storage Building (2403-WA, WB, AND WC) 93040010-22CN

Photo Taken 199



Typical Interior 93040010-25CN

Photo Taken 1993



Waste Storage Building (2403-WD) 93040010-13CN

Photo Taken 1993



Photo Taken 1993



Waste Storage Building 2404-WA 96080579-29CN

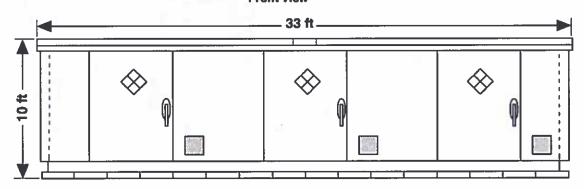
Photo Taken 1996



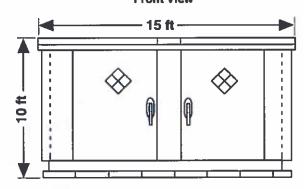
Interior

96080579-32CN Photo Taken 1996

### Typical Large Waste Storage Module Front View



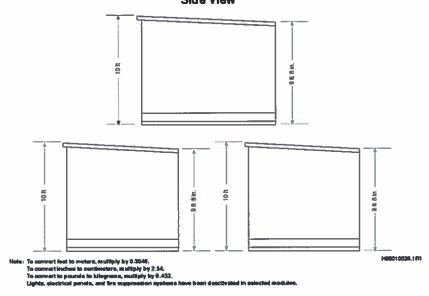
### Typical Small Waste Storage Module Front View



Note: To convert feet to meters, multiply by 0.3048.

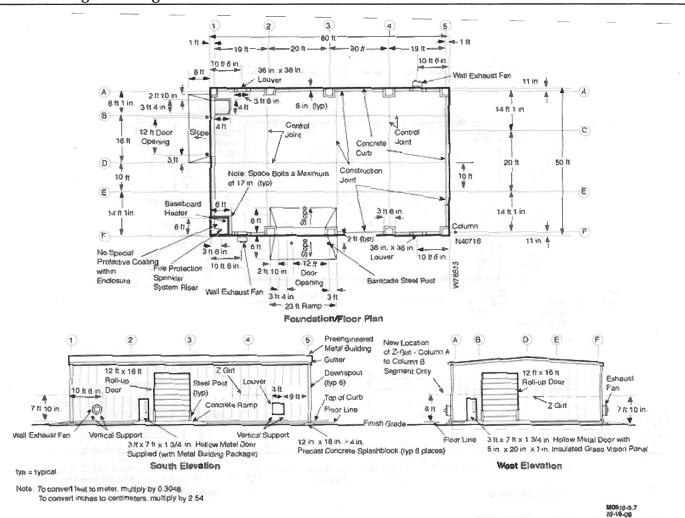
H980 40178.7

### Flammable and Alkali Metal Waste Storage Module Side View

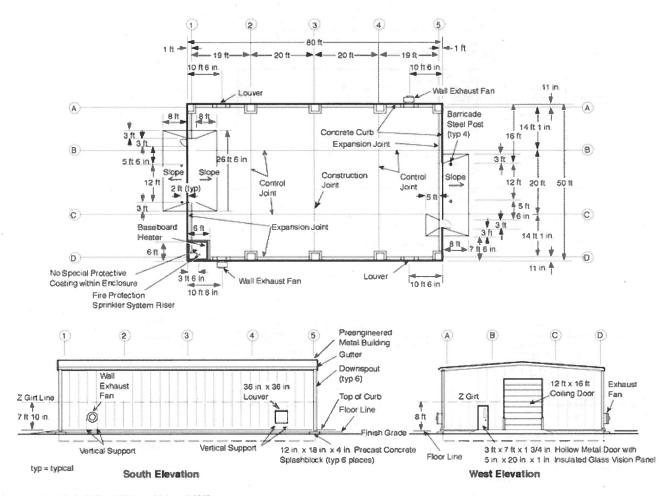


M0610-3.2 10-16-06

### Waste Storage Building 2401-W



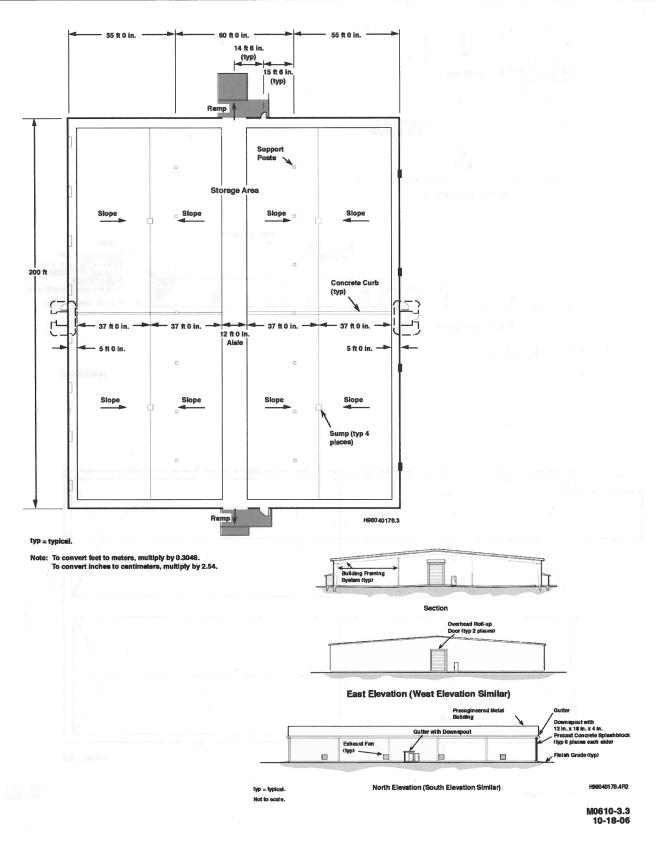
### Waste Storage Buildings 2402-W and 2402-WB through 2402-WL)



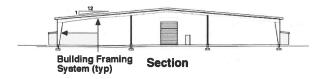
Note: To convert feet to meters, multiply by 0.3049. To convert inches to centimeters, multiply by 2.54.

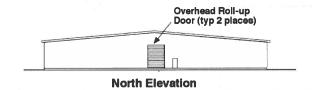
M0510-3.5 10-19-05

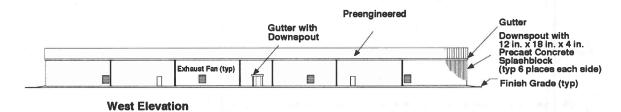
### Waste Storage Buildings (2403-WA through 2403-WC)



### Waste Storage Building 2403-WD



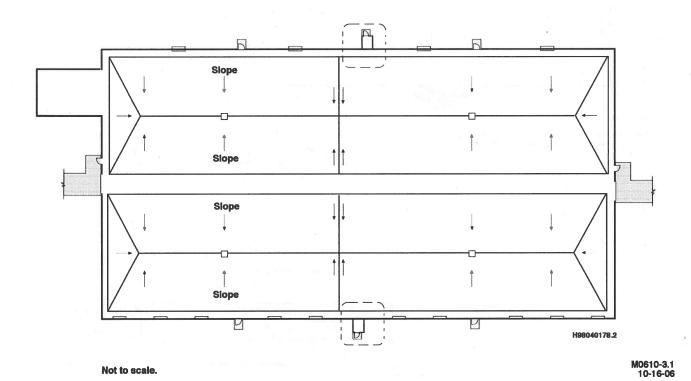




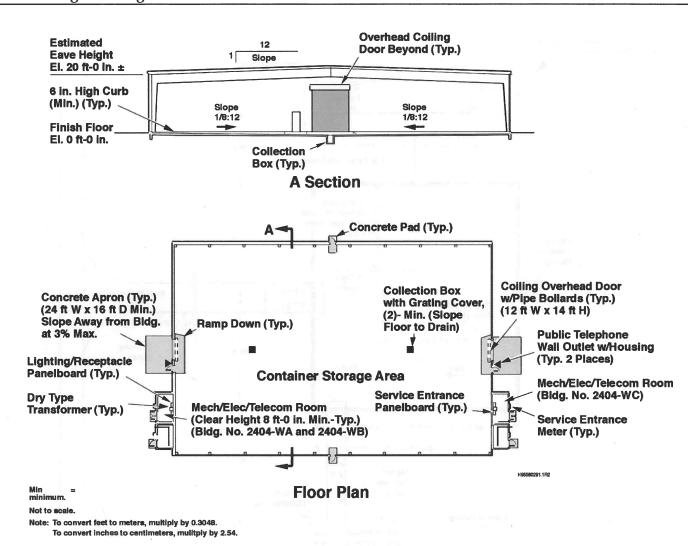
Metric Conversion: 2.54, centimeters per inch 0.305 meter per foot

typ = typical.

39304068.11R2

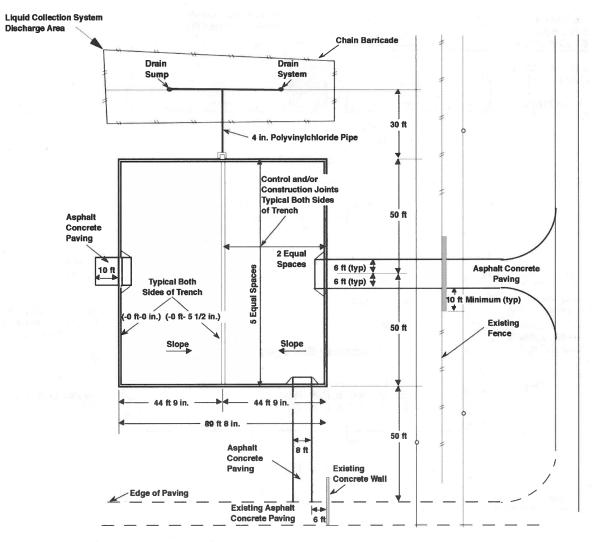


#### Waste Storage Building 2404-WA



M0610-3.5 10-18-06

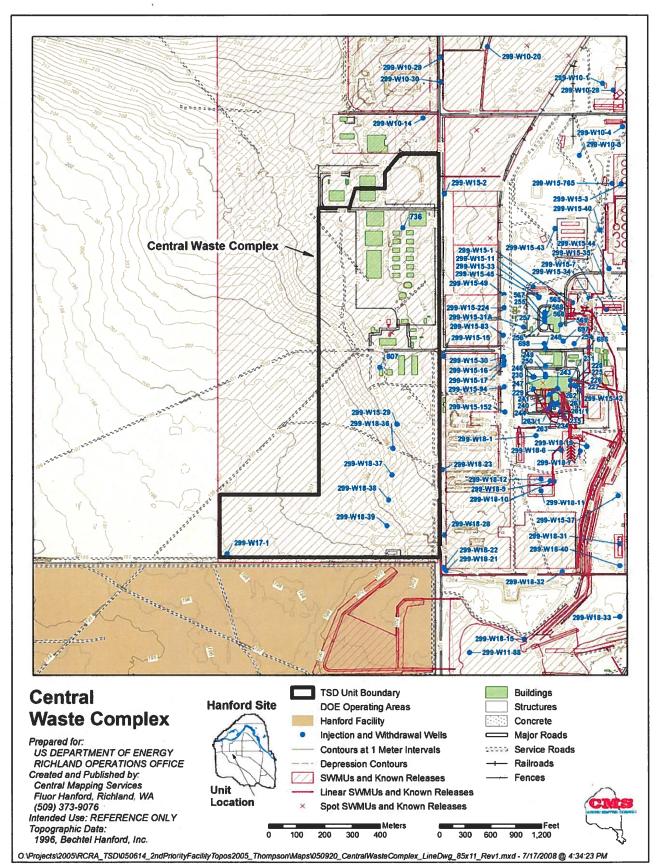
### Waste Storage Pad



H98010038.6 R2

typ = typical.

M0610-3.4 10-18-06



This page intentionally left blank.

A	TTENDANCE DO	OCTED
Inspection Title:	TENDANCE RO	Date:
(CHPRC) EPA INSPECTION OF THE CENTR	AL WASTE COMPLEX -	APRIL 2, 2014
CLOSEOUT BRIEFING INSPECTION NUMBER: 2014-031		
AGENCY	NAME	LOCATION:
EPA	JOEL WILLIAMS	
	Name, CO/ORG, and	Phone Numbers
Name	CO/ORG	Phone Number (s)
JERRY CAMMANINI	MSA-EIS	376-1554
Tolf Williams To	CHPRC-EP	376-4282
Mike Greene	WRPS-EP	509-373-1582
Paula Grau	CHPRC-EP	539-0991
Stever Lose	Ecology	372-7894
Edward Holbrook	Ecology	372-7909
Nancy Ware	ECU	372-7912
Kathy Conaway	Ecology	372-7890
Deborah Singlaton	FLOURY	37-2-7923
KEVIN SCHANILEC	EPA'	206-553-1061
Jack Bollor	EPA	206-593-2953
Michael Prescott	EPA Contractor	203-373-3811
Engene Grobs	PUNL	509.375.2575
Clift Clark	DOE-RL	(509) 376 - 9333
JAMES LYNCH	DOE-ORP	509-376-4170
LINDA Petersen	PO-CHPRC-DWF	15 509-373-4200
Darron Boone	CHPRC-DWARS	509-373-089/
Pant, Start	CHPRC	376-7510
Stophanie Johanse	CHPQ(	373-1031
richael Collins	Dot	376 6536

The following table is documents and information that was requested by EPA as part of the ongoing review of the CWC TSD Unit inspection on April 1, 2014.

Request	EPA Document/Response Request	DOE/CHPRC Response to Documents and/or Information Request	Number of Pages
04/01/2014	Copy of current approved CWC and Waste Receiving and Processing (WRAP) Facility Part A Forms	Copies of the current CWC and WRAP Part A Forms:  Central Waste Complex Part A Form, Revision 8, dated 10/01/2008	30
		Form, Revision 6, dated 10/01/2008.	24
04/01/2014	Copy of waste inventories and dates of waste that went into these units:  • Flammable and Alkali Storage Modules  • Outside Storage Areas A and B	Copy of the waste inventories list for:  • Flammable/Alkali List (F-AMW) - Pink  • Outside Storage Area A (OSA-A) - Tan  • Outside Storage Area B (OSA-B) - Blue.	3
04/01/2014	Copy of Waste Analysis Plan for CWC	<ul> <li>HNF-1886, Revision 8, "Central Waste Complex Waste Analysis Plan," dated 12-05-2012</li> </ul>	54
	Copy of procedure(s) for processes related to accepting waste into CWC for storage	<ul> <li>Central Waste Complex Waste Acceptance Procedures:</li> </ul>	
- ,1-5,1		<ul> <li>Administrative Procedure PRC-PRO-WM-40523</li> <li>"Solid Waste Operations Complex Waste Acceptance Program," Revision 0, Change 1, dated 02/04/2014</li> </ul>	25
25,000 25,000 1 , —		<ul> <li>Administrative Procedure PRC-PRO-WM-40524</li> <li>"Waste Verification Program for Solid Waste</li> <li>Operations Complex Acceptance, "Revision 0,</li> <li>Change 1, dated 01/24/2014</li> </ul>	34
		- Technical Procedure SW-100-143 (SWSD-PRO-OP-51637) "Management of Solid Waste in CWC," Revision 7, Change 2, dated 03/18/2014.	47
	04/01/2014	Processing (WRAP) Facility Part A Forms  04/01/2014 Copy of waste inventories and dates of waste that went into these units:  • Flammable and Alkali Storage Modules  • Outside Storage Areas A and B  04/01/2014 Copy of Waste Analysis Plan for CWC  Copy of procedure(s) for processes related to accepting waste into CWC for storage	Processing (WRAP) Facility Part A Forms  Central Waste Complex Part A Form, Revision 8, dated 10/01/2008  Waste Receiving and Processing Facility Part A Form, Revision 6, dated 10/01/2008.  Copy of waste inventories and dates of waste that went into these units: Flammable and Alkali Storage Modules Outside Storage Areas A and B  Copy of Waste Analysis Plan for CWC  Copy of Waste Analysis Plan for CWC  Copy of procedure(s) for processes related to accepting waste into CWC for storage  Copy of procedure(s) for processes related to accepting waste into CWC for storage  Copy of procedure PRC-PRO-WM-40523  "Solid Waste Operations Complex Waste Acceptance Procedure PRC-PRO-WM-40524  "Waste Verification Program for Solid Waste Operations Complex Acceptance, "Revision 0, Change 1, dated 01/24/2014  Administrative Procedure PRC-PRO-WM-40524  "Waste Verification Program for Solid Waste Operations Complex Acceptance, "Revision 0, Change 1, dated 01/24/2014  Technical Procedure SW-100-143 (SWSD-PRO-OP-51637) "Management of Solid Waste in

Request Number (Item)	Date of Request	EPA Document/Response Request	DOE/CHPRC Response to Documents and/or Information Request	Number of Pages
4	04/01/2014	Copies of the Manifest/Shipping Records for waste shipped and received at CWC for the months of September, October, and December of 2013	Manifests:  • Uniform Hazardous Waste Manifest, Tracking Number 008855299, dated 9-12-2013, CHPRC to Perma-Fix Northwest	1
			<ul> <li>Uniform Hazardous Waste Manifest, Tracking Number 008855300, dated 9-10-13, CHPRC to Perma-Fix Northwest</li> </ul>	1
*	ŧ		<ul> <li>Uniform Hazardous Waste Manifest, Tracking Number 001553593, dated 9-19-2013, CHPRC on Behalf of Perma-Fix Northwest to CWC.</li> </ul>	3
			Shipping Records:	4
		The state of the s	<ul> <li>Radioactive Shipment Record, P2001 and P2002000, dated 10/23/2013</li> </ul>	m ¥
			<ul> <li>Radioactive Shipment Record, P2011 and P2014000, dated 12/11/2013.</li> </ul>	4
5	04/01/2014	Copy of Training Records (1 <sup>st</sup> page only) for the CWC Environmental Compliance Officer (ECO) and three (3) Nuclear Chemical Operators (NCOs)	Copy of Training Records for 1-ECO and 3-NCOs	4
6	04/01/2014	Copy of CWC inspection plan (2402W and 2304W Storage Buildings, Outside Storage Areas and Miscellaneous)	Technical Procedure SW-040-043 (SWSD-PRO-OP- 51514) "Inspect CWC & Miscellaneous Buildings," Revision 9, Change 5, dated 04/02/14	60
7	04/01/2014	Copy WRAP inspection plan (2404WB and 2404WC Storage Buildings)	Technical Procedure WRP1-SV-1605 (WRAP-PRO- OP-52204) "WRAP Layup Surveillance," Revision 0, Change 5, dated 03/10/2014	32
	9	4L +5		

Request Number (Item)	Date of Request	EPA Document/Response Request	DOE/CHPRC Response to Documents and/or Information Request	Numbe
8	04/01/2014	Copies of the following CWC inspections:	Information Request	of Page
	2	Weekly	CWC Weekly Inspections SW-040-043 "Inspect CWC & Miscellaneous Buildings - Appendix A - Weekly - Building/Outside Storage Areas Checklist"	
_	Adl de		- September 2013	- 777
		- September and November 2013	[Note: The last five weekly inspection records	118
			were for the compliance week beginning on 9/30/2013 (Monday) but completed on 10/01/2013	
	Note that		- November 2013	92
		<ul> <li>January, February, and March 2014</li> </ul>	- January 2014	96
		January, 1 columny, and March 2014	- February 2014	96
			- March 2014	111
		<ul> <li>Monthly</li> <li>November and December 2013</li> </ul>	CWC Monthly Inspections SW-040-43 "Inspect CWC & Miscellaneous Buildings - Appendix H - Monthly - Fire Extinguisher Inspection Checklist" - November 2013     December 2013	11 10
			CWC Inspections SW-040-43 "Inspect CWC & Miscellaneous Buildings - Appendix I -	
			Monthly/Quarterly RCRA CWC Spill Kit Inventory Checklist" (Monthly performed)  - November 2013  - December 2013	1 1
	: VS		The property of the second of	

Request Number (Item)	Date of Request	EPA Document/Response Request	DOE/CHPRC Response to Documents and/or Information Request	Number of Pages
		Quarterly     Last two (2) quarters	<ul> <li>CWC Quarterly Inspections SW-040-043 "Inspect CWC &amp; Miscellaneous Buildings - Appendix I - Monthly/Quarterly CWC Spill Kit Inventory Checklist" (Quarterly performed)</li> <li>October 2013</li> <li>January 2014</li> </ul>	1 1
d	١		CWC Quarterly Inspections SW-040-043 "Inspect CWC & Miscellaneous Buildings - Appendix L Weekly/Quarterly RCRA Emergency Response Trailer Inventory Checklist"     Checklists from October 2013 to March 2014	4
9	04/01/2014	Copy of CWC Building Emergency Plan	Building Emergency Plan for Central Waste Complex, HNF-IP-0263-CWC, Revision 19, dated November 15, 2012	31
10	04/01/2014	Copy of WRAP Building Emergency Plan	Building Emergency Plan for Waste Receiving and Processing Facility, HNF-IP-0263-WRAP, Revision 17, dated November 5, 2012	32
11	04/01/2014	Copy of CWC Contingency Plan	Note: The CWC Contingency Plan is imbedded into the CWC Building Emergency Plan (BEP) as provided in Item 9 of this table. In the CWC BEP, Page 7 of 31, Section 2.0 states "this plan meets the requirements for contingency planning as required by WAC 173-303. Sections 1.5, 3.1, 4.0, 7.1, 7.1.1, 7.1.2, 7.2, 7.2.1, 7.2.2, 7.2.3, 7.2.4, 7.2.5, 7.2.5.1, 7.3, 8.2, 8.4, 9.0, 9.1, 9.2. 9.3, 9.4, 9.5, 9.6, 11.0, 12.0, and 13.0 of the Building Emergency Plant (BEP) are enforceable sections meeting RCRA contingency planning requirements."	N/A

Request Number (Item)	Date of Request	EPA Document/Response Request	DOE/CHPRC Response to Documents and/or Information Request	Number
12	04/01/2014	Copy of WRAP Contingency Plan	Note: The WRAP Contingency Plan is imbedded into the WRAP Building Emergency Plan (BEP) as provided in Item 10 of this table. In the WRAP BEP, Page 7 of 32, Section 2.0 states "this plan meets the requirements for contingency planning as required by WAC 173-303. Sections 1.5, 3.1, 4.0, 7.1, 7.1.1, 7.1.2, 7.2, 7.2.1, 7.2.2, 7.2.3, 7.2.4, 7.2.5, 7.2.5.1, 7.3, 8.2, 8.4,	of Pages N/A
10	ab a		9.0, 9.1, 9.2. 9.3, 9.4, 9.5, 9.6, 11.0, 12.0, and 13.0 of the Building Emergency Plant (BEP) are enforceable sections meeting RCRA contingency planning requirements."	
13	04/01/2014	Procedure(s) for reporting spills at CWC	The following are copies of procedures for reporting spills at CWC:	
			Administrative Procedure PRC-PRO-EP-40270     "Environmental Event Prevention, Response, and Notification," Revision 0, Change 4, dated 03/18-2014	26
		1- 1-1 (1911) 1-1-1-1	Administrative Procedure WMP-200-7.4 (PRC-PRO-SH-52337) "WFMP Notifications," Revision 1, Change 2, dated 07/23/2013.	19
14	04/01/2014	Copies of the SWITS report for the following PINs that have been identified at CWC:	The following are copies of the Solid Waste Information and Tracking System (SWITS) Container Listing Reports	1
48	Jan of	<ul><li>0009255</li><li>9600177</li></ul>	(pages include cover sheet):  • 0009255 - Transuranic Mixed Waste (TRUM) Waste  • 9600177 - Transuranic Waste	8 7
		<ul><li>0087221</li><li>0087233</li></ul>	• 0087221 - 618-10 Project Concrete Drums • 0087233 - 618-10 Project Concrete Drums	10
		• 0048296	<ul> <li>0087233 - 618-10 Project Concrete Drums</li> <li>0048296 - TRUM Waste</li> </ul>	10 8
		• 0048281	• 0048281 - TRUM Waste	8
		• 0045415	0045415 - Repackaged RSW	9
		• 0030972	0030972 - TRUM Waste	19

Request Number (Item)	Date of Request	EPA Document/Response Request	DOE/CHPRC Response to Documents and/or Information Request	Number of Pages
		<ul><li>0037445</li><li>342101-07</li></ul>	<ul> <li>0037445 - TRUM Waste</li> <li>322101-07 - TRUM Waste</li> </ul>	9
	85	• 0041591	• 0041591 - 308 Building Waste	6
		• 0042066	• 0042006 - TRUM Waste	12
	-	• 764DMAF14	764DMAF14 - MLLW Debris	7
	8	• Z9-780639	• Z9-780639 - Liquids in Drum Liner.	12
15	04/01/2014	Copy of the following procedures:	The following are copies of the drum waste list and ACMP procedures:	
		Drum Watch List Procedure	<ul> <li>Administrative Procedure SWSD-PRO-OP-52802</li> <li>"Management of the List of SWOC Containers with a Higher Potential for Corrosion (Watch List)," Revision 0, Change 0, dated 03/06/2014</li> </ul>	13
	04/02/2014	Abnormal Container Management Program Procedure (ACMP).	Administrative Procedure WMP-200-4.12 (PRC-PRO-NS-52318) "SWOC Abnormal Container Management Program," Revision 20, Change 2, dated 08/23/2013.	17
16	04/01/2014	Copies of the following Acceptable Knowledge (AK) Packages:	The following are copies of the requested AK packages:	
right.		• 300 Area	<ul> <li>Acceptable Knowledge Summary Report for Mixed Transuranic Waste from the 300 Area Facilities, WMP-31733, Revision 2, dated 12/30/2008</li> </ul>	394
-		• PFP	<ul> <li>The following are AK Package documents for the Plutonium Finishing Plant</li> <li>Acceptable Knowledge Summary Report for Plutonium Finishing Plant Absorbed Liquid Organics and Soil Waste from Hanford Burial Grounds, WMP-32150, Revision 0, dated 02/14/2007</li> </ul>	228

Request Number (Item)	Date of Request	EPA Document/Response Request	DOE/CHPRC Response to Documents and/or Information Request	Number of Pages
			<ul> <li>Acceptable Knowledge Summary Report for Plutonium Finishing Plant Complex Mixed Debris Waste from the Hanford Site Burial Grounds, WMP-33208, Revision 1, dated 02/05/2008</li> <li>Acceptable Knowledge Summary Report for Plutonium Finishing Plant Complex Effluents, WMP-33204, Revision 0, dated 08/09/2007.</li> </ul>	216
		• WARDS	<ul> <li>The following are the AK Package documents for the Westinghouse Advanced Reactors Division:         <ul> <li>Acceptable Knowledge Documents for Westinghouse Advanced Reactors Division, HNF-30025, Revision 2, dated 05/26/2009</li> <li>Acceptable Knowledge Evaluation Report for Westinghouse Advanced Reactor Division, 218-W-4C-T07 and 218-W-3A-T17, Revision 0, dated 06/19/2007.</li> </ul> </li> </ul>	77 79
		Z9 Soils	Acceptable Knowledge Summary report for 216-Z-9 Crib Soil and Debris Waste, WMP-38831, Revision 0, 09/25/2008	153
Table of the state		• Exxon	Acceptable Knowledge Summary Report for Exxon Nuclear Company, Inc., Mixed Waste Debris, ENC- AK-01-00, dated March 2006	39
	II	Kingsel College Colleg	TO THE PROPERTY OF THE PARTY OF	

Request Number (Item)	Date of Request	EPA Document/Response Request	DOE/CHPRC Response to Documents and/or Information Request	Number of Pages
17	04/01/2014	Copy of the following 231ZDR-11 Container Information:	The following are copies of the 231ZDR-11 container information:	Į.
!		Records on amount of liquid collected in catch pans	SWOC Tracking List of Active Liquid Waste Containers from Expansion Area	1
		Test data results on liquid collected	Sample test data results on liquid collected from 231ZDR-11 Box:	
		». «	<ul> <li>DOE Sample Results</li> <li>Final Analytical Report for Liquid Waste</li> <li>Samples from 231ZDR-11 Box - Sample</li> <li>Delivery Group 222S20120400, Document No.:</li> <li>20120400, dated April 6, 2012.</li> <li>Ecology Sample Results</li> </ul>	45
			<ul> <li>Letter, ALS Environmental, Mr. Lance Steere to Washington State Department of Ecology, Mr. Jerry Yokel, Subject: ALS Work Order: 12-03- 155, Project Name CWC Inspection, dated March 22, 2012</li> </ul>	8
0			<ul> <li>ALS Environmental - Metals - Case Narrative Analysis Report</li> </ul>	132
		(44)	<ul> <li>ALS Environmental – GC/MS Volatiles - Case Narrative Analysis Report</li> </ul>	83
			ALS Environmental – GC/MS Semivolatiles – Case Narrative Analysis Report	230
			<ul> <li>Letter, ALS Environmental, Mr. Lance Steere to Washington State Department of Ecology, Mr. Jerry Yokel, Subject: ALS Work Order: 12-03- 277, Project Name CWC Inspection, dated March 31, 2012</li> </ul>	8
	. "		ALS Environmental – PCBs - Case Narrative     Analysis Report.	127

Request Number (Item)	Date of Request	EPA Document/Response Request	DOE/CHPRC Response to Documents and/or Information Request	Number of Pages
18	04/02/2014	Recovery Plan for Lighting Issues at CWC Storage Buildings	Copy of Recovery Plan# CWC-RP-14-006 "CWC Emergency Light Repairs," Revision 1, dated 4-3-2014	6
19	04/02/2014	Outside Storage Area A - During the inspection a Radiological Tag was found on the box with a March 2014 date on itwould like to know if that date on the tag is when the box was placed into the storage area or was this just the date of the radiological tag when placed on the box for whatever reason (i.e., tag was missing).	Response: During routine radiological surveys of the Outside Storage Area A, the Radiological Control Technicians (RCTs) are required to verify that the "radiological tags" (labels) are attached and legible to the box that is being surveyed. If the radiological tag is faded or missing, a survey is conducted; a new radiological tag is attached to the box with the required information and dated with the date that the survey was conducted. This date does not represent the date on which the box has been placed within the Outside Storage Area A, but the date the radiological tag was attached to the box.  Item 2 of this table provides the information when the boxes were placed in the Outside Storage Areas.	1
20		Copies of the following rosters:	The following are copies of the attendance rosters:	
	04/01/2014	<ul> <li>Pre-Briefing and Inspection Attendance Roster 4-1-2014</li> </ul>	EPA Inspection of the Central Waste Complex     Attendance Roster - April 1, 2014	2
	04/02/2014	Close-Out Briefing Attendance Roster 4-2-2014	EPA Inspection of the Central Waste Complex     Attendance Roster – Out Briefing - April 2, 2014.	1



### Department of Energy

Richland Operations Office P.O. Box 550 Richland, Washington 99352

14-ESQ-0073

APR 1 5 2014

Mr. J. L. Boller U.S. Environmental Protection Agency Region 10 1200 Sixth Avenue, Suite 900 (AWT-122) Seattle, Washington 98101

Dear Mr. Boiler:

INFORMATION REQUESTED IN SUPPORT OF THE APRIL 1, 2014, U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) TREATMENT, STORAGE, AND DISPOSAL (TSD) INSPECTION OF THE HANFORD FACILITY RESOURCE CONSERVATION AND RECOVERY ACT PERMIT: CENTRAL WASTE COMPLEX (CWC)

On April 1, 2014, EPA along with the State of Washington Department of Ecology conducted a TSD inspection at the 200 West CWC. During the April 1, 2014, inspection post-briefing EPA requested the following:

- Copies of documents that were identified during the inspection as enumerated in the list provided by EPA.
- Response to information requests from EPA during the TSD inspection.

The documents requested by EPA have been placed into an electronic format on a compact disc for review by EPA.

If you have any questions, please contact me, or your staff may contact Ed MacAlister, Director, Environmental, Safety, and Quality, on (509) 373-0462.

Sincerely,

ESQ:ACM

Stacy L. Charboneau, Assistant Manager for Safety and Environment

Stary Charbonian

Enclosure

cc w/encl: See page 2

#### cc w/encl:

K. A. Conaway, Ecology

M. K. Prescott, EC

K. Schanilec, EPA Region 10

Administrative Record, TSD: S-2-8, H6-08

Ecology NWP Library (CD)

Environmental Portal, LMSI, A3-01

HF Operating Record (J. K. Perry, MSA, H7-28)

#### cc w/o encl:

G. Bohnee, NPT

R. Buck, Wanapum

S. L. Dahl-Crumpler, Ecology

R. H. Engelmann, CHPRC

D. A. Faulk, EPA

L. E. Gadbois, EPA

S. Harris, CTUIR

J. A. Hedges, Ecology

S. Hudson, HAB

R. Jim, YN

K. McNeill, EPA Region 10

K. Niles, ODOE

D. Rowland, YN

J. R. Seaver, CHPRC

E. R. Skinnarland, Ecology

#### cc w/encl:

K. A. Conaway, Ecology

M. K. Prescott, EC

K. Schanilec, EPA Region 10

Administrative Record, TSD: S-2-8, H6-08

Ecology NWP Library (CD)

Environmental Portal, LMSI, A3-01

HF Operating Record (J. K. Perry, MSA, H7-28)

#### cc w/o encl:

- G. Bohnee, NPT
- R. Buck, Wanapum
- S. L. Dahl-Crumpler, Ecology
- R. H. Engelmann, CHPRC
- D. A. Faulk, EPA
- L. E. Gadbois, EPA
- S. Harris, CTUIR
- J. A. Hedges, Ecology
- S. Hudson, HAB
- R. Jim, YN
- K. McNeill, EPA Region 10
- K. Niles, ODOE
- D. Rowland, YN
- J. R. Seaver, CHPRC
- E. R. Skinnarland, Ecology

The following table is responses that were requested by EPA per email to DOE dated April 10, 2014 as of part of the EPA CWC TSD Unit inspection on April 1, 2014.

Request Number (Item)	Date of Request	EPA Information Request	DOE/CHPRC Response to Request
1	04/10/2014	Of the approximately 9,000 or so containers currently managed at CWC,  • approximately what percentage or number are those for which LDR treatment	To provide an answer to your questions, some background information needs to be provided:  As of 4/17/2014, there are 8,858 waste packages being stored at the CWC. The split between non-hazardous waste/dangerous
		technologies are available, such that they could be treated and sent for final disposition, and	waste (HW/DW) to those that are HW/DW is as follows:
		what number or percentage are those for which LDR treatment technologies have not	• Non- HW/DW Low Level Waste (LLW): 60 packages (≈20 m3)
		been developed or are not yet available.	• HW/DW Mixed Low Level Waste (MLLW): 93 packages (≈67 m3)
			• Non- HW/DW Transuranic (TRU): 2,469 packages (≈1,785 m3)
			• HW/DW Transuranic Mixed Waste (TRUM): 6,236 packages (≈8,867 m3).
			The 2,529 LLW and TRU waste packages are not subject to landisposal restrictions (LDRs). This represents ≈29% of the total waste package population at CWC.
			Based on Waste Isolation Pilot Plant (WIPP) waste acceptance requirements, TRUM waste being disposed at WIPP are exempted from LDRs except those associated with D001, D002 and D003 dangerous waste codes (ref: WIPP Waste Acceptance
			Criteria, DOE/WIPP-02-3122). There are currently only 45 TRUM waste packages carrying one or more of these three (3) waste codes in storage at CWC. Based on a review of these 45
	,		waste packages, approximately ten (10) of the waste packages would require additional treatment technologies and/or

Request			
Number	Date of		
(Item)	Request	EPA Information Request	DOE/CHPRC Response to Request
(acom)	Atoquos	Dana Antor manon avoquest	processing capabilities to make the waste packages meet the WIPP acceptance requirements. This represents ≈0.1% of the total waste packages in storage in CWC. In addition to these waste packages noted above, there are approximately 40 packages (TRUM and TRU) that contain TSCA PCB liquids which do not meet WIPP acceptance requirements because of the liquids. Even though disposal of TSCA regulated PCB liquids are outside the scope of RCRA LDRs, these liquids will need to be absorbed to meet WIPP waste acceptance requirements; however, to do so will require a Risk-Based Disposal Approval (RBDA) from EPA.
			For the MLLW, treatment capability and capacity does exist commercially for the majority of these waste packages. Below is the breakdown of the waste packages:  • Approximately 50 packages can be shipped directly Offsite for treatment.
			<ul> <li>Approximately 35 packages will require repackaging at the Hanford Site to make them Department of Transportation (DOT) compliant prior to shipment Offsite for treatment.</li> </ul>
		2F 8L <sup>2</sup>	Approximately 10 packages will require treatment at the Hanford site due to their radionuclide content exceeding Offsite facilities' radiological acceptance limits. These 10 packages will require additional processing capabilities due to the radiological concerns.
			Therefore, approximately 35 (or ≈0.3%) of the currently stored waste packages at CWC will require additional treatment technologies and/or processing capabilities to make them LDR complaint for disposal at either the Hanford Site or WIPP.

Request			
Number	Date of		· ja
(Item)	Request	EPA Information Request	DOE/CHPRC Response to Request
2	04/10/2014	It is EPA's understanding that, for waste that is retrieved, approximately half of the waste after processing will be low-level mixed waste that may be treated at Perma-Fix or other facility for eventual land disposal at ERDF, while half is TRU waste which is intended for shipment to WIPP.	The rough order of magnitude ROM cost to repackage TRUM waste drums on the Hanford Site into WIPP certifiable waste packages is approximately \$30K per drum. This includes cos associated with maintaining the repackaging facilities in a ready-to-serve posture, labor costs for the various repackaging activities and material costs.
		<ul> <li>For waste intended to be sent to WIPP, it is EPA's understanding that Hanford is responsible for packaging the waste to meet WIPP criteria, while WIPP funds the on-site</li> </ul>	Please see below the ROM costs based on treatment type. These unit rates are referenced from CHPRC letter CHPRC- 1204633 dated 10/24/2012.
		verification (now done by WIPP personnel), transportation and final management at the	LDR Complaint MLLW meeting Hanford Site disposal requirements: \$1,370/m3
		WIPP facility. Please specify the typical cost or range of costs to do the WIPP-compliant packaging at the Hanford facility.	MLLW requiring macroencapsulation (e.g., debris, radioactive lead solids, radioactive batteries): \$18,300/m.
29.7		<ul> <li>For waste which is not sent to WIPP, what</li> </ul>	MLLW requiring neutralization and/or RCRA metal stabilization: \$33,500/m3
		is the approximate cost or range of costs, on a per drum, per cubic foot, or other basis, charged by Perma-Fix or other outside	• MLLW requiring thermal destruction (e.g., D001 High-TOC, organic UHCs, CMBST codes, etc.): \$64,700/m3.
		facility, for the waste at CWC? If there are different types of waste for which the schedule of charges is different, please provide data for all types of wastes.	Note: these unit rates include Hanford Site labor costs, transportation costs, contracted treatment costs, and disposal costs. Waste volume is based on the waste package volume prior to treatment.
3	04/10/2014	It is EPA's understanding that additional funds for disposition of waste must be requested from the Department of Energy Headquarters by the Hanford facility.	A briefing to the regulators (EPA and Ecology) is provided annually to present budget and budget request information.  Note that TRU waste repackaging to meet the WIPP waste
		Please provide the past three years of requests made for funding by which wastes could be sent to Perma-Fix or other facility	Acceptance Criteria are part of Project RL-0013, Solid Waste Stabilization and Disposition.
		for treatment.	<ul> <li>Regulator Briefing - March 8, 2011, for RL-0013</li> <li>President's Budget (FY 2011) - \$135,026K</li> </ul>

Request Number (Item)	Date of Request	EPA Information Request	DOE/CHPRC Response to Request
			o Request Allocation (FY 2013, Request Year) - \$346,203K - This includes \$24,242K for small container TRU waste repackaging (M-091-46) and \$38,644K for large container TRU waste repackaging (M-091-44) and TRU waste retrieval (M-091-40)  Regulator Briefing - March 7, 2012, for RL-0013 Appropriation (FY 2012) - \$143,482K Requirements (FY 2014, Request Year) - \$152,409K - This includes \$65.4M for K Basin sludge storage and TRU waste repackaging (M-091)  Regulator Briefing - March 2013, for RL-0013 Enacted (post-sequester) (FY 2013) - \$118,732K Estimated Requirements (FY 2015, Request Year) - \$344,000K - This includes "Restart of TRU Program in support of the M-091 milestone commitments."
			Per the Tri-Party Agreement (Hanford Federal Facility Agreement and Consent Order):  • Article XLVII, Force Majeure  145. A Force Majeure shall mean any event arising from causes beyond the control of a Party that causes a delay in or prevents the performance of any obligation under this Agreement, including, but not limited to:  G. insufficient availability of appropriated funding, if DOE shall have made a timely request for such funds as

Request Number (Item)	Date of Request	EPA Information Request	DOE/CHPRC Response to Request
			part of the budgetary process as set forth in Article XLVIII (Cost, Schedule, Scope, Integration, Planning and Reporting) of this Agreement.
			<ul> <li>Article XVVIII, Cost, Schedule, Scope, Integration, Planning and Reporting         148. DOE shall take all necessary steps to integrate Hanford programs and to obtain timely funding in order to fully meet its obligations under this Agreement. This shall be accomplished in the following manner:         A. In its annual budget request, DOE shall include estimate funding levels required to achieve full compliance with this agreement.     </li> </ul>
			Milestones regarding the repackaging of transuranic (TRU) waste to meet WIPP waste acceptance criteria are in the TPA Action Plan, Appendix D, M-091 Milestone series.
4	04/10/2014	Of the containers currently being managed at the CWC, please specify which wastes Energy believes are covered by the TPA (presumably Milestone 91), and	The Tri-Party Agreement (TPA) Milestones do not address disposition of LLW and TRU waste, only the MLLW and TRUM waste are covered by TPA Milestones.
		<ul> <li>further which wastes are covered by the Hanford Site Mixed Waste Land Disposal Restrictions Summary Report.</li> </ul>	For the MLLW in storage:  • M-091-42 Milestone: There are 75 MLLW packages associated with this TPA Milestone in CWC storage.
			<ul> <li>M-091-43 Milestone: There were 17 MLLW packages associated with this TPA Milestone in CWC storage.</li> </ul>
			Only one (1) MLLW package in storage at the CWC is not covered by a TPA Milestone. This is a recently generated

### **Attachment D**

**Document Disc** 

USDOE Hanford (CWC)
WA7890008967
April 2014 RCRA Inspection Report

J 457 99577 K 457 99576 Joint 350 1434a

to topus .

ten, en Thub. I

( )

.

ngaga, Prisa i

